Refine Search

Search Results -

Terms	Documents
L12 and (assets or capital)	2

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search:

Refine Search

Recall Text

Clear

Interrupt

Search History

DATE: Monday, December 31, 2007 **Purge Queries** Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR		
L13	L12 and (assets or capital)	2	L13
L12	L11 and (free-market or free with market or free near market or free adj market)	5	L12
L11	l1 and L10	250	L11
L10	705.clas.	56244	L10
L9	705/1	8052	L9
L8	705/36	1824	L8
L7	705/36r	314	L7
L6	ecosystem same assets	19	L6
L5	ecosystem same free-market	4	L5
L4	L3 and assets	4	L4
L3	l1 and L2	6	L3
L2	free-market	60	L2

L1	ecosystem	5680	L1

END OF SEARCH HISTORY

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Inventors Search: 09/819159; patent literature

Set      Items    Description
S1           5    S AU=(VANDE()POL, M? OR VANDE() POL M? OR VANDE() POL(2N)MARK OR VANDEPOL,
M? OR VANDEPOL M? OR VANDEPOL(2N)MARK OR VANDE(2N)POL)
S2           2    S S1 AND IC=G06F?
 ; show files
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[File 350] **Derwent WPIX** 1963-2007/UD=200782

**File 350:* *English-language translations of Chinese Utility Model registrations are available starting with update 200769.*

[File 347] **JAPIO** Dec 1976-2007/Jun(Updated 070926)

[File 348] **EUROPEAN PATENTS** 1978-2007/ 200751

**File 348: For important information about IPCR/8 and forthcoming changes to the IC= index, see HELP NEWSIPCR.*

[File 349] **PCT FULLTEXT** 1979-2007/UB=20071227UT=20071120

**File 349: For important information about IPCR/8 and forthcoming changes to the IC= index, see HELP NEWSIPCR.*

2/5/1 (Item 1 from file: 348) **Links**
EUROPEAN PATENTS

01509696
FREE-MARKET ENVIRONMENTAL MANAGEMENT SYSTEM HAVING INSURED CERTIFICATION TO A PROCESS STANDARD
SYSTEME DE GESTION ECOLOGIQUE LIBERALE CERTIFIE CONFORME A UNE NORME
Patent Assignee:

- **Vande Pol, Mark E.**; (4228760)
  25150 Mountain Charlie Road; los gatos, CA 95033-8320; (US)
  (Applicant designated States: all)

Inventor:

- **Vande Pol, Mark E.**
  25150 Mountain Charlie Road; los gatos, CA 95033-8320; (US)

	Country	Number	Kind	Date
	WO	2002077776		20021003
Application	EP	2002753870		20020327
	WO	2002US9530		20020327

Priorities	US	819159		20010327

2/5/2 (Item 1 from file: 349) **Links**
PCT FULLTEXT

00943642

FREE-MARKET ENVIRONMENTAL MANAGEMENT SYSTEM HAVING INSURED CERTIFICATION TO A PROCESS STANDARD

SYSTEME DE GESTION ECOLOGIQUE LIBERALE CERTIFIE CONFORME A UNE NORME

Patent Applicant/Inventor:

- **VANDE POL Mark E**
  25150 Mountain Charlie Road, Los Gatos, CA 95033-8320; US; US(Residence); US(Nationality);

	Country	Number	Kind	Date
Patent	WO	200277776	A2	20021003
Application	WO	2002US9530		20020327
Priorities	US	2001819159		20010327

English Abstract:

Environmental regulation by government is structurally incapable of satisfying its mandate. The present invention is an alternative, free-market management system designed to deliver a superior product, at lower cost, with an insured guarantee, and without regulatory oversight by government. The system uses an insured, certified best-practice form of process certification that objectively accounts the financial value of ecosystem resources. The conduct of practice within the system accounts the price of assets at risk and characterizes their function by which to market them for their ability to offset the environmental impacts of industrial, commercial, and residential activities.

```
Inventors search; 09/819159; non patent literature

Set      Items   Description
S1           0   S AU=(VANDE()POL, M? OR VANDE() POL M? OR VANDE() POL(2N)MARK OR VANDEPOL,
M? OR VANDEPOL M? OR VANDEPOL(2N)MARK OR VANDE(2N)POL)
S2          14   S AU=VANDE
S3           0   S S2 AND ENVIRON?
S4           0   S S2 AND ECOLO?
 ; show files
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[File 2] **INSPEC** 1898-2007/Dec W2

[File 35] **Dissertation Abs Online** 1861-2007/Oct

[File 65] **Inside Conferences** 1993-2007/Dec 31

[File 99] **Wilson Appl. Sci & Tech Abs** 1983-2007/Oct

[File 474] **New York Times Abs** 1969-2007/Dec 29

[File 475] **Wall Street Journal Abs** 1973-2007/Dec 29

[File 583] **Gale Group Globalbase(TM)** 1986-2002/Dec 13

**File 583: This file is no longer updating as of 12-13-2002.*

[File 139] **EconLit** 1969-2007/Nov

[File 20] **Dialog Global Reporter** 1997-2007/Dec 31

[File 15] **ABI/Inform(R)** 1971-2007/Dec 29

[File 610] **Business Wire** 1999-2007/Dec 31

**File 610: File 610 now contains data from 3/99 forward. Archive data (1986-2/99) is available in File 810.*

[File 810] **Business Wire** 1986-1999/Feb 28

[File 476] **Financial Times Fulltext** 1982-2007/Dec 29

[File 613] **PR Newswire** 1999-2007/Dec 31

**File 613: File 613 now contains data from 5/99 forward. Archive data (1987-4/99) is available in File 813.*

[File 813] **PR Newswire** 1987-1999/Apr 30

[File 634] **San Jose Mercury** Jun 1985-2007/Dec 23

[File 624] **McGraw-Hill Publications** 1985-2007/Dec 28

**File 624: Homeland Security & Defense and 9 Platt energy journals added Please see HELP NEWS624 for more*

[File 9] **Business & Industry(R)** Jul/1994-2007/Dec 20

[File 275] **Gale Group Computer DB(TM)** 1983-2007/Dec 25

[File 621] **Gale Group New Prod.Annou.(R)** 1985-2007/Dec 18

[File 636] **Gale Group Newsletter DB(TM)** 1987-2007/Dec 25

[File 16] **Gale Group PROMT(R)** 1990-2007/Dec 21

**File 16: Because of updating irregularities, the banner and the update (UD=) may vary.*

[File 160] **Gale Group PROMT(R)** 1972-1989

[File 148] **Gale Group Trade & Industry DB** 1976-2007/Dec 19

**File 148: The CURRENT feature is not working in File 148. See HELP NEWS148.*

[File 256] **TecInfoSource** 82-2007/Jul

[File 625] **American Banker Publications** 1981-2007/Dec 24

[File 268] **Banking Info Source** 1981-2007/Dec W1

[File 626] **Bond Buyer Full Text** 1981-2007/Dec 24

[File 267] **Finance & Banking Newsletters** 2007/Dec 10

?

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Subject Search; 09/819159; patent literature; abstracts/bibliographic

Set     Items    Description
S1    4243518    S ECOSYSTEM? ? OR ENVIRONMENT?? OR NATURE OR AIR OR WATER OR GROUNDWATER
OR WATERTABLE OR ATMOSPHER?? OR HABITAT OR ENVIRONMENTAL? OR CONSERVATION OR ECOLOG? OR
(ECO OR RESOURCE)()FRIENDLY OR BIONOMIC?? OR BIOGEOCHEMICAL OR ECOPHAGY OR
GREEN()ECONOMIC? ? OR BIOCENOSE OR BIOSPHERE
S2         12    S S1(5N)((FREE OR OPEN)()MARKET? ? OR CAPITALISM OR PRIVATI? OR
LAISSEZ()FAIRE OR (COMPETITIVE OR NASH OR INTERTEMPORAL OR ECONOMIC)()EQUILIBRIUM)
S3     581798    S S1(5N)(MANAGEMENT OR MANAG??? OR TRACK??? OR SUPERVIS??? OR REGULAT???
OR OVERSEE??? OR OVERSIGHT OR ADMINISTRATION OR DIRECT??? OR ORGANIZ? OR ORGANIS? OR
CONTROL OR CONTROLS OR CONTROLL? OR GOVERN??? OR MONITOR??? OR ENFORC? OR RESTRICT??? OR
OPERAT???)
S4    1720837    S VALUE OR VALUATION OR APPRAIS?? OR ASSESS? OR (ESTIMAT??? OR DETERMIN?
OR EVALUAT?)(2N)(WORTH OR COST? ? OR PRODUCTION OR PERFORM? OR OPERAT? OR ACCOMPLISH? OR
FUNCTION? OR PRACTIC? OR CONDUCT OR ACHIEV?)
S5      33422    S S4(5N)(ASSETS OR ASSET OR PROPERT??? OR ANNUIT??? OR EARNINGS OR INCOME
OR INTEREST OR RETURN OR RETURNS OR PROFIT OR PROFITS OR GAIN OR GAINS OR RESOURCES OR
CAPITAL OR MONEY OR MONIES OR DIVIDEND OR DIVIDENDS OR COMMODIT???)
S6          5    S S2 AND S3
S7          3    S S6 AND S5
S8          2    S S7 AND IC=G06F?
S9          4    S S2 AND S5
S10         3    S S9 AND IC=G06F?
S11         1    S S10 NOT S8
 ; show files
```

[File 350] **Derwent WPIX** 1963-2007/UD=200782

**File 350: English-language translations of Chinese Utility Model registrations are available starting with update 200769.*

[File 347] **JAPIO** Dec 1976-2007/Jun(Updated 070926)

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8/5/1 (Item 1 from file: 350) **Links**

Derwent WPIX

0013245369 *Drawing available*

WPI Acc no: 2003-330560/200331

Related WPI Acc No: 2002-713655

XRPX Acc No: N2003-264665

Free-market environmental management system for product development, assesses financial cost of mitigating operational processes, and assigns assessed cost to ecosystem assets at risk

Patent Assignee: VANDE POL M E (POLM-I)

Inventor: VANDE POL M E

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20030014342	A1	20030116	US 2000192183	P	20000327	200331	B
			US 2001819159	A	20010327		

Alerting Abstract US A1
NOVELTY - A validating unit validates operational processes developed **managing ecosystem** assets. The financial costs mitigating the operational processes, is **assessed** and assigned to remaining ecosystem **assets** which are at risk. The failures are indemnified to produce outputs that meet the operational processes specification in order to repair or mitigate the failure.
DESCRIPTION - An INDEPENDENT CLAIM is included for **ecosystem** assets **managing** method.
USE - **Free**-market **environmental management** system for product development.
ADVANTAGE - Enables delivery of superior product at lower cost, with an insured guarantee, without regulatory oversight by government.
DESCRIPTION OF DRAWINGS - The figure shows the schematic view of the **free**-market **environmental management** system.

8/5/2 (Item 2 from file: 350) **Links**
Derwent WPIX

0012854929
WPI Acc no: 2002-713655/200277
Related WPI Acc No: 2003-330560
XRPX Acc No: N2002-562974
Free-market management system for government regulated business environmental policies involves analysis of prior production costs and re-evaluation of which products to market based on introduced costs
Patent Assignee: VANDE POL M E (POLM-I)
Inventor: VANDE POL M E

Patent Family (2 patents, 94 countries)

Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
WO 2002077776	A2	20021003	WO 2002US9530	A	20020327	200277	B
AU 2002306925	A1	20021008	AU 2002306925	A	20020327	200432	E

Alerting Abstract WO A2
NOVELTY - System uses an insured, certified best-practice form of process certification that objectively accounts the financial **value** of ecosystem **resources**. Conduct of practice within the system accounts the price of assets at risk and characterizes their function by which to market them for their ability to offset the environmental impacts of industrial, commercial, and residential activities.
DESCRIPTION - An INDEPENDENT CLAIM is also included for a method for **managing ecosystem** assets.
USE - Free-market **management** system with consideration of government **environmental** regulations.
ADVANTAGE - The system is a free-market management system designed to deliver low cost, insured guarantee, without regulatory oversight by government.

++++++++++++++++++++++++++++++++

11/5/1 (Item 1 from file: 350) **Links**
Derwent WPIX

0004384618
WPI Acc no: 1988-119613/198817
Database usage metering and protection system - measures decrypted information from database and communicates to remote centralised billing facility which charges user
Patent Assignee: ELECTRONIC PUBLISH (ELPU-N); ELECTRONIC PUBLISHING RESOURCES INC (ELPU-N); PERSONAL LIBRARY SO (PERS-N); SHEAR V H (SHEA-I)
Inventor: SHEAR V H

Patent Family (10 patents, 13 countries)

Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
WO 1988002960	A	19880421	WO 1987US2565	A	19871008	198817	B
US 4827508	A	19890502	US 1986918109	A	19861014	198920	E
EP 329681	A	19890830	EP 1987907181	A	19871008	198935	E
US 4977594	A	19901211	US 1986918109	A	19861014	199101	E
			US 1989310938	A	19890216		
US 5050213	A	19910917	US 1986918109	A	19861014	199140	E
			US 1990562996	A	19900806		
US 5272750	A	19931221	US 1986918109	A	19861014	199351	E
			US 1989310938	A	19890216		
			US 1990562996	A	19900806		
			US 1991679191	A	19910202		
			US 1992983260	A	19921130		
EP 329681	A4	19901024	EP 1987907544	A	19870911	199513	E
US 5410598	A	19950425	US 1986918109	A	19861014	199522	E
			US 1989310938	A	19890216		
			US 1990562996	A	19900806		
			US 1991679191	A	19910402		
			US 1992983260	A	19921130		
			US 1993161868	A	19931206		
			US 1994261018	A	19940616		
			US 1994311311	A	19940927		
EP 329681	B1	19960117	EP 1987907181	A	19871008	199608	E
			WO 1987US2565	A	19871008		
DE 3751678	G	19960229	DE 3751678	A	19871008	199614	E
			EP 1987907181	A	19871008		
			WO 1987US2565	A	19871008		

Alerting Abstract WO A
A medium stores the database in encrypted form, and index information correlates portions of the database with index keys. A host digital signal processor is preprogrammed to generate a database access request, read the index information from the storage medium, identify the portions of the encrypted database which satisfy the access request, and read the identified encrypted database portions from the storage medium.
A secure decoder control logic device coupled to the host processor receives the encrypted database portions, decrypts portions read by the host processor to produce corresponding decrypted information, and transmits the

decrypted information back to the host processor. The decoder control logic device also measures the quantity of usage of other parameters pertaining to the information decrypted, and stores these measurements in a non-volatile (and in many cases tamperproof) memory device.
ADVANTAGE - Permits authorised users to access and use database and absolutely prevents uuthorised database use and copying.

01528625/9 **Links**
Dissertation Abs Online

01528625 ORDER NO: AAD97-06327

THE ROLE OF ENVIRONMENTAL ATTITUDES IN INCENTIVE-BASED ENVIRONMENTAL MANAGEMENT: THE CASE OF THE WETLAND RESERVE PROGRAM

Author: DIAGNE, ASSANE
Degree: PH.D.
Year: 1996
Corporate Source/Institution: THE LOUISIANA STATE UNIVERSITY AND AGRICULTURAL AND MECHANICAL COL. (0107)
Director: E. JANE LUZAR
Source: Volume 5709A of Dissertations Abstracts International.
PAGE 4055 . 179 PAGES
Descriptors: ECONOMICS, AGRICULTURAL ; ENVIRONMENTAL SCIENCES ; POLITICAL SCIENCE, PUBLIC ADMINISTRATION
Descriptor Codes: 0503; 0768; 0617

Environmental policy in the United States is increasingly relying on incentive-based mechanisms (IBM). Incentive-based mechanisms, are voluntary environmental management instruments based on free market environmentalism, a framework that attempts to harness market forces. A multi-disciplinary approach was developed to evaluate participation decisions in IBM's such as the Wetland Reserve Program. This approach extended the traditional utility maximization approach to choice behavior by including alternative measures of environmental attitudes based on the theory of reasoned action or the New Environmental Paradigm. The addition of these psychological constructs conceptually improved the utility maximization by allowing the consideration of well established determinants of behavior.

Probit and Tobit models derived from the conceptual framework were empirically tested using primary data collected via a mail survey of Louisiana wetland owners. Results presented suggest that the acreage of wetlands owned, the level of information about the WRP, respondents' involvement in environmental organizations, education level, income, the number of people living in the household, and attitudes were significant in explaining Louisiana wetland owners' decision to offer to participate as well as the level of participation in the WRP.

The significance of attitude measures as explanatory factors suggests that a successful implementation of IBM programs depends, in addition to getting the economic incentive "right", on properly addressing attitudinal concerns. Comparison between the specific attitude measures derived from the theory of reasoned action and the general NEP-based environmental attitude was inconclusive. Therefore, until further evaluation, these alternative measures can be used interchangeably.

01144200/9 **Links**
Gale Group Newsletter DB(TM)

01144200 **Supplier Number:** 40930398 **(THIS IS THE FULLTEXT)**

BRITAIN SHOULD INCLUDE ENVIRONMENTAL COSTS IN PRICES OF PRODUCTION: STUDY

Multinational Environmental Outlook , v 15 , n 18 , p N/A
Sept 5 , 1989
ISSN: 0899-5079
Language: English **Record Type:** Fulltext
Document Type: Magazine/Journal ; Trade
Word Count: 413
Text:

Environmental assets should be incorporated into national accounts, and taxes should be imposed on products or processes that are environmentally unfriendly, according to a report from a special adviser to the British environment secretary. A depletion of resources and loss of amenities would be classified as a reduction in the environment's gross domestic product (GDP).

The report, "Sustainable Development," argues that calculations of national assets should include "environmental capital" as well as man-made capital. Environmental capital includes fuels, minerals, waste-assimilating capacity of rivers and the biodiversity of nature, said David Pierce, director of the London Environment Economic Centre.

The traditional approach to environmental protection has been to exercise control through regulation, but Pierce argues that market forces should be used. A free market treats environmental resources as if they have zero price. Pierce says economic tools exist to apply costs-benefit analysis to the resources and their value should be incorporated in the price of man-made production.

Government Needs Pollution Taxes, Permits

The government could sell pollution permits and apply pollution taxes to regenerate environmental resources, the study says. The government, for example, could sell permits to dump effluent into rivers, and firms would have to incorporate the cost in the price of their output, forcing them to carefully calculate the effect of the increase in price. This way the government will have the funds to restore river quality, Pierce explained.

A hydrocarbon tax could pay for the work necessary to compensate for the ravages of acid rain and global warming, the report notes. "There is a vital and urgent need to integrate environmental impacts into our measures of economic progress," the report states.

Calculation of the GDP should be adjusted to deduct the costs of environmental damage and investments to prevent such damage, and to incorporate depreciation of environmental assets. "Sustainable development means changing the signals given to economic decision-makers: from politician and civil servant to minister, from industrialist to consumer,"

the report says. "It does not mean leaving the environment to market forces."

The opposition Labour Party has described the concept as little different from its policy of considering "social cost" in development. It argues that using tax rather than regulation is wrong. "Taxing a nitrate-fed carrot until it costs more than an organic one is plain daft," said David Blunkett, Labour's environmental spokesman. "Better to give financial incentives to organic farms and to set strict limits that would outlaw fertilizer or pesticide misuse."

Author: Robert McDonald

Publisher Name: Business Publishers, Inc.
Industry Names: BUSN (Any type of business); ENV (Environment)

┬á┬á┬áFulltext available through:┬á┬á STIC Full Text ; 1-10-2008"
@PJL SET JOBAT

01858240/9 **Links**

Fulltext available through: USPTO Full Text Retrieval Options STIC Full Text Retrieval Options

ABI/Inform(R)

01858240 05-09232

Valuing nature land in extinct markets

Lusvardi, Wayne
Appraisal Journal v67n3 pp: 293-305
Jul 1999
CODEN: APPJA5
ISSN: 0003-7087 **Journal Code:** APJ
Document Type: Journal article **Language:** English **Length:** 13 Pages
Special Feature: Charts Graphs References
Word Count: 7807

Abstract:

The interference with open markets for marginally economic land in environmental preservation areas has created blighted markets. As a result, limited data are available to determine market value and market demand for uses other than preservation are limited. Alternative valuation methods that have been proposed to fill this void are inconsistent with the concept of market value. In such cases, government land appraisal standards provide for a limited market approach for preservation by buyers other than the government agency acquiring the property. However, the same market conditions that result in blighted market conditions also eliminate private demand for preservation.

Text:

Headnote:

The interference with open markets for marginally economic land In environmental preservation areas has created blighted markets. As a result, limited data are available to determine market value, and market demand for uses other than preservation are limited. The author contends that altemative valuation methods that have been proposed to fill this void are inconsistent with the concept of market value. In such cases, government land appraisal standards provide for a limited market approach for preservation by buyers other than the government agency acquiring the property. However, the same market conditions that result in blighted market conditions also eliminate private demand for preservation.

A paradox in the appraisal of land suitable for environmental preservation in areas of sensitive natural resources is that there is a lack of open market value sales transactions but an abundance of nonmarket value sales

evidence, which cannot be used in an appraisal.

This situation often occurs where land is downzoned to marginally economic use, a result of pressure by interest groups to protect sensitive habitat and resources. Typically there is no compensation for such a regulatory taking. But if a nonprofit preservation agency voluntarily acquires the land, the transaction price may be predicated on the old zoning or may reflect a nonmarket premium to mitigate the effects of the regulatory action and to bring about a sale. However, if a government agency decides to condemn the land, then land appraisal standards and guidelines will prevail and the sales prices from such preservation purchases will be excluded as nonmarket value transactions or project-influenced sales. This situation is often called a "windfall or wipeout" system of compensation.

Because of the intervention of government and preservationists to protect the physical environment, the market for land with sensitive natural resources in some areas is thin or is disappearing. The number of land acquisitions by government and nonprofit preservation organizations is crowding out the market in some areas to the point that there is no longer enough valid information for buyers and sellers to make informed choices and for markets to run smoothly. In such thin or disappearing market conditions, the most unique, high-quality land will be sold in small numbers, mainly to government agencies or nonprofit preservation organizations and land identified as less critical may not be sold at all. As economists Arthur O'Sullivan and Steven Sheffrin point out, where there is a breakdown in market information for any economic good, buyers and sellers are unable to distinguish between the prices for lowand high-quality properties, and the private market demand for high-quality goods disappears.1

What is often unrecognized by real estate appraisers in active preservation market areas is that seemingly normal private sales transactions, not just government land acquisitions, are affected by both public and private measures to preserve the environment. This extends beyond the impact of downzoning that is noncompensable under existing law. The cumulative effect of various measures to protect the environment reduces the amount of competition for environmentally sensitive land, mostly to a tier of limited market and nonmarket buyers. The market for the land identified to contain the most sensitive environmental resources may be reduced to only government and nonprofit preservation organizations that may exert embargo-like conditions on the transaction of such properties. Examples of such interference in the market, especially on high-quality properties in the land market are:

1. Targeted preemptive purchase by nonprofit preservation trusts of lands with high-quality natural amenities desired by both the market (e.g., waterfront land, view, and buffer) and preservationists (e.g., ocean, lake, riparian land, view shed for ecotourism, and buffer).

2. Actual or the threat of government condemnation actions of land with the most critical environmental resources.

3. Pyramid sales from nonprofit conservation trusts to government agencies and other forms of collusion.

4. The practice of private preservation trusts to steer private

nondevelopment buyers to properties with sensitive natural resources.

5. Legislation authorizing debt-for-land swaps, allowing tax-defaulted land to be deeded to the state for preservation instead of sold in the open market.2

6. Imposed transfer of development rights in designated preservation areas, resulting in the affected properties' lack of marketability.

7. Owner's dedicating conservation easements to properties containing less critical environmental resources where no public or nonprofit buyer can be found for the property so that it is a stranded asset.

8. Lawsuits challenging environmental impact reports on proposed land developments even at low densities.

9. Strategic environmental purchases of land to block access, assemblage, or the extension of infrastructure, or a strategic change in zoning that would frustrate or suppress development.3

10. Veto actions by regional planning bodies in response to environmental lobbying (e.g., the California Coastal Commission and the Lake Tahoe Regional Planning Board).

11. Political pressure to adopt transfer development rights programs, resulting in donor parcels as stranded assets.

The term used to describe the paradoxical lack of market value transactions of environmentally sensitive land is "evidentiary blight." It means there is tainted sales evidence that cannot be used to appraise land suitable for preservation despite the existence of a number of applicable nonmarket sales.

An appraiser, Charles Warren, aptly summarized this paradoxical situation:

Do these possible transactions (described above) bear any resemblance to the private market? Very little. To some extent, they can exist only in the absence of private market activity. The public is constitutionally required to pay "just compensation" for taken land. Just compensation generally means market value. However, for reasons of environmental politics and land economics, there may be no private market activity. In its absence, what is market value?4

However, the market value standard is so universally embedded in the law that it has been judicially defined and applied even in illiquid and dormant markets. According to Kinter v. United States, "Even where there have been no sales of similar property in the vicinity upon which a basis of valuation might be predicated, the quest is still for 'market value."'5 The crux of this paradoxical and controversial problem of valuing land suitable for environmental preservation is "what is the market" for such land when none or few of the sales transactions reflect open and competitive market conditions? In such situations, government appraisal standards provide for the valuation of land that is suitable only to preservation use by a limited market appraisal model.6 This model requires simultaneous demand by a third party for preservation use other than by the

government entity acquiring the property. The problem is that the same blighting conditions that narrow the highest and best use of land to preservation also interferes with market demand by private, arm's length preservation buyers. A number of appraisal methods have been proposed to fill this void in the market.

APPROACHES TO DEFINING A PRESERVATION MARKET

Currently there are several proposed approaches for defining precisely what the market or nonmarket for preservation land is. These approaches often have confusing names: public interest value, mitigation market value, contingent valuation, highest bid approach, just and equitable approach, and other unnamed and obscure approaches.7

Preservation easement market (value to owner). Some appraisers and land economists contend that the prices paid for dedicating conservation easements reflect the value of preservation land. In states where private property owners have the right of condemnation, others assert that an environmental encumbrance on land can be self-created. However, in the above cases, a property owner can create a one-sided "seller's preservation market" to obtain a unilaterally established price in the market. The "paper diminution" in value claimed by property owners for self-imposing a conservation easement on their properties does not require the customary haggling and give-and-take negotiations that would occur if a second party were personally involved in two-party transactions. The "value to the owner" concept has been soundly rejected by no less than the U.S. Supreme Court."

Government agency market (public interest value approach). This approach is appealing and seemingly the most straightforward. The logic here is if the only sales available are preservation sales by public or semipublic entities, these sales are believed to make up the market. It is contended that the prices paid by government agencies and nonprofit conservation trusts reflect a public market for the preservation use of land. Some proponents of this position go so far as to argue that the higher prices often paid by government and nonprofits for preservation land reflect a price premium attributable to the intrinsic biotic or habitat value of such properties, or the public interest value in protecting such natural resources.

Because the object of voluntary preservation purchases is to remove land from the private market, public and nonprofit entities must often bid prices up beyond what the market would otherwise bear. The reason that bid prices for preservation land must be higher than even the highest and best economic use is that most often there is no substitute for preservation use in the market. Government agencies often target for purchase a single specific property for preservation on the grounds that it is unique and irreplaceable. Wildlife agencies often designate certain "mitigation parcels" or "exchange parcels" to offset the environmental impacts created by development. Under such situations, a landowner can "hold out" for a bonus price or a legal settlement price in lieu of litigation.

A weakness of this approach is that under prevailing law the actions of a public agency or nonprofit trust are not allowed to affect value

unilaterally in a real estate appraisal. The law is well established that the public cannot be charged for any enhancement in value resulting from the activities of a public or semipublic agency, nor can a landowner be asked to accept less than full market value because of any diminution in value caused by the activities of a public or taxexempt project. The U.S. Supreme Court stated the following:

It is not fair that the government be required to pay the enhanced price for which its demand alone has created. That enhancement reflects elements of the value that was created by the urgency of its need for the article. It does not reflect what a "willing buyer would pay to a willing seller" (United States v. Miller, supra, 317 U.S,. 369, 374) in a fair market. It represents what can be exacted from the government whose demands in the emergency have created a seller's market. In this situation, as in the case of land included in a proposed project of the government, the enhanced value reflects speculation as to what the government can be compelled to pay. This is hold-up value, not fair market value. That is a value which the government itself created and, hence, in fairness should not be required to pay.9

Mitigation market (mitigation bank, environmental subdivisions). David Michael Keating, Charles Edmonds, and Sarah Stanwick propose that environmental mitigation banks represent a separate and legitimate market for environmental resource land.lo They imply that the prices paid for mitigation bank credits reflect fair market value. They go so far as to propose a discounted cash flow technique typically used to value income-generating properties to value such land.

However, there are insurmountable problems with considering mitigation as a market." Mitigation credits are not an interest in real property and the prices paid for credits reflect forced transactions in regulated markets. Further, the cash flow methodology proposed for the valuation of mitigation credits is highly susceptible to speculative assumptions. Government land appraisal standards also prohibit the appraisal of any sort of speculative mitigation bank that does not already have an approved biotic survey and management plan, easements dedicated, perpetual endowment fund, and presales in place. Even if all the above conditions could be met, mitigation credits would not comply with government or appraisal industry standards because they reflect a complementary market, not a replacement market.

In addition, the major theoretical problem with this whole approach is that mitigation does not reflect the process of economic substitution. In economics, a complementary good is the converse of a substitute good. Economic complements tend to be used together and are defined as the "relation between two goods or services in which a rise in the price of one decreases the demand for the other."2 For instance, cereal and eggs are economic complements and butter and margarine are economic substitutes. Complements are contrasted with substitutes when the increase in the price of a good increases the demand in the other. Land appraisal is typically concerned with economic substitutes, not complements. Environmentally impacted land and mitigation land are an example of an economic complement. The problem with appraising mitigation land as a separate market is that an increase in the demand and value of such land decreases the demand and

value of impacted land at an adjacent or off-site location. Because

mitigation is an economic complement, not a substitute, it may be considered an artificial market.

As noted by economists Robert S. Pindyck and Daniel L. Rubinfeld, another problem with complementary goods is that an increase in their price increases the cost of the whole bundle of goods, so that people demand less of both goods.13 For example, if people eat both eggs and cereal for breakfast, there will be a decline in the demand for both. This is precisely what happens with such complementary preservation mechanisms such as conservation easements, transfer of development rights (TDRs)14, environmental subdivisions, and mitigation banks. Complementary preservation mechanisms are intended to be give-backs for noncompensable takings. However, measures to replace open and competitive markets with artificial environmental market mechanisms are being recognized by the courts as a regulatory taking because of the diminution in demand and value found in complementary goods (see figure 1).15

Preservation exchange market (transfer development rights). Another attempt at defining an alternative market for preservation land is the government creation of transfer development rights (TDR) programs. A TDR is the transfer of development rights from one property (the sending or donor parcel) to another (the receiving or donee parcel). Unlike mitigation bank credits, TDRs are considered real property. The intent of a TDR program is to preserve land at no cost to taxpayers by shifting development density to other areas where growth is more acceptable. The problem with TDRs is that when no receiving property can be clearly identified, no market demand can be discerned and thus no value can be placed on the sending property.16 Moreover, TDRs and mitigation credits have the same problem: They are noneconomic complements, not substitutes.

Ecotourism market (contingent valuation, delphi method). In the "market of public opinion" approach, the ultimate end users, visitors, or ecotourists to national parks, nature preserves, and wilderness parks make up the market for preservation land. The major methods used for valuing preservation land under this approach to the problem are contingent valuation, travel cost methods, and the delphi technique. Contingent valuation is based on opinion research surveys to determine how willing people or experts are to pay or be taxed to visit, travel to, or protect natural resources. Here, the ultimate end users or public nonusers, not buyers and sellers in the real estate market, set the value of the preservation land.

This approach is analogous to appraising shopping center land. If customers had the choice of how much to pay to enter a commercial shopping center, they would probably report nothing or a marginally economic price. Difficulties with this approach are that:

The public opinion survey process can create the very values they purport to measure.

Survey results are often inconsistent and unreliable predictors of actual behavior. The results are not empirically verifiable.

Rarely are people knowledgeable in purchasing unimproved land in contrast to entry fees for national parks.17

This valuation approach replaces the market with public opinion or the opinion of experts. The problem with such valuation methods is that they are nonmarket based, hypothetical, and inadmissible evidence of market value under eminent domain law.

Public-private preservation market (pyramid sales). This market is made up of conservation agencies, land trusts, and private preservationists. The major problem with this approach is that it ignores the reality of collusion.

(Graph Omitted)

Captioned as: FIGURE 1

Many preservation land sales transactions involve purchases by private nonprofit land trusts that, in turn, resell the property to a government agency for a mark-up price (i.e., pyramid sales). Such pyramid-like sales by "shill" buyers, and subsequent resales, are not arm's length transactions that can be considered to reflect fair market value between unrelated parties. Moreover, the front-leg purchase of such dual transactions often occurs with full knowledge that the government will buy the property for the then-established sales price plus a mark-up fee based on an appraisal relying on the sales price of the first transaction as proof of market value.

In reverse fashion, it is also customary for many government utilities and other public entities to dedicate to nonprofit land conservancies (and/or state and county park departments for perpetual management) land purchased for the mitigation of public works projects' environmental effects. Thus, nature land is often conveyed back and forth from the government to the private sector and vice versa. The collaboration of the government and nonprofit sectors of the market for preservation land invalidates many nonprofit preservation agency sales from being considered in market value appraisals.

Arm's length preservation market (thirdparty demand approach). The only known exception to the prohibition against appraising land for the same preservation use that a government agency is acquiring it for is what I call the "third-party demand" test. The Uniform Standards for Federal Land Acquisitions states this rule as follows: "A proposed highest and best use cannot be the use for which the government is acquiring the property (i.e., missile test range, airfield, and park), unless there is a prospect and demand for that by others than the government."18

For example, a government agency wants to acquire seasonally inundated lakefront land for flood control purposes where a nonprofit preservation agency or private preservationist is contemporaneously active in purchasing the same portion of lakefront land for preservation. The acquisition activities of the third party represents a valid market as long as the preservation efforts are not within the scope of the same public project for which the land is being acquired (i.e., flood control) and do not

involve collusion.

Another situation is if there is potential for assemblage to an established habitat prese

rve for what is called "environmental connectivity." The classic case of potential environmental assemblage is a certain 6,254-acre ranch on the eastern tip of Santa Cruz Island facing the mainland in Santa Barbara County, California. The ranch faces the mainland and has 12 miles of ocean frontage. The property contains rare marine, biological, historical, and archaeological resources. It would be highly improbable that other land comprising 12 miles of ocean frontage could be assembled in the current highly restricted land market along the California coastline. The only available sales data of island properties are government purchases made as part of the Channel Islands National Park. The Nature Conservancy owns the remaining 54,000 acres of the island. The ranch was the subject of a 1997 condemnation action by the U.S. Department of Interior. Absent the influence of the public project for which the property is being taken, the obvious demand for the ranch property would be for assemblage by the Nature Conservancy, a third-party buyer other than the government. Another example of singular demand from third-party preservation buyers is a case in which an adjoining owner is looking to protect a view or seeking an environmental buffer.

ELEMENTS OF BLIGHT MODEL

The limited-market model diagram depicts how the "arm's length third-party market model" applies to the market analysis for preservation land (see figure 2). An explanation of the different components of this model is as follows:

Unconventional highest use tests. Normally, the purchase of land by a buyer for a use that is legally permissible, physically suitable, and the most economically profitable is its highest and best use. This is not the case with land in thin, disappearing, and embargoed markets due to preservation activities. Private preservation is an unorthodox highest and best use problem because a property need not be legally zoned for such a use and does not need to meet the conventional tests of economic feasibility. This is not much different from speculative land in which the ultimate legal use is typically unknown and the buyer motivation includes the risk of taking an uneconomic loss upon resale. To meet the tests of highest and best use, preservation land must be physically suitable and the prospect of a demand by an arm's length nongovernment buyer must be present. Moreover, it is not unusual in environmentally regulated land markets that a major portion of a property is zoned for open space, with only a little left for some economic use. It would seem illogical to rule out market demand by a private preservation buyer for properties that are substantially open space in character. The likelihood of any actual development on such properties even at the lowest possible densities is remote, given the formidable government and environmental opposition a property owner would need to surmount.

(Chart Omitted)

Captioned as: FIGURE 2

However, this approach to highest and best use analysis does not apply to situations in which land with established significant development potential is purchased for environmental preservation in urban areas. In such situations, the highest use of the property is removed from the property and replaced with less intense-use open space. The prices paid for higher-use properties cannot be considered in the valuation of land that is predominantly open space in character in thin, disappearing, or environmentally embargoed markets.

Smaller and larger parcel issues. Under existing land use law, the local government can zone portions of property for open space as long as a viable economic use is left on the property. In other words, a portion of land without sensitive environmental resources is left economic but the remainder is left uneconomic. There is no legal guideline for determining what proportion of land must remain economic (i.e., developable) or uneconomic (i.e., open space). Conceivably, a property owner can suffer a substantial "wipeout" of equity from downzoning and be left with 1% of economically usable land.19 For example, the 6,254-acre ranch on Santa Cruz Island, California, is allowed to cluster housing on only 2% of its land area or on parcels of 320 acres in minimum size. Unless legally subdivided, the property must sell as an economic whole. However, if an owner can legally subdivide the property into both development parcels and openspace parcels, there may be enhanced marketability to a conventional buyer and a preservation buyer.

New subdivision law in California that allows for the creation of an environmental subdivision of land of at least 20 acres might solve part of the complex preservation valuation problem.20 However, environmental subdivisions must have a completed biological survey, management plan, and conservation easements dedicated to a local wildlife agency costing a minimum of approximately $1 million regardless of size.21 An endowment fund must also perpetually manage the resources on the preservation parcel. These high costs minimally equate to $50,000 per acre for a 20-acre subdivision. This is an insurmountable economic barrier to the creation of most environmental subdivisions that can usually only be assumed by a large public entity or the largest developers. For example, it is estimated that 50% of wetlands are comprised of one acre or less in size.22 Further, creating environmental subdivisions on large parcels of land that are already predominantly zoned for open space in highly restricted markets is uneconomic unless there is a ready, able, and willing buyer for the environmental subparcel to front all the costs. Because environmental subdivisions are uneconomic, the subdivision of land for environmental protection can be construed as the subtle conversion of a property right into a financial obligation. Environmental subdivisions tend to suffer the fate of most other uneconomic complements described earlier of diminished demand and value.

Project influence rule. Under the Uniform Standards for Federal Land Acquisitions, the actions of a government agency cannot influence the appraised market value of land to be acquired by the government, whether positively or negatively. As shown on the accompanying diagram, the project influence rule prevents an appraiser from concluding the same highest use for property that the government is acquiring it for because the demand is

artificially created by the government rather than the market. The only possible exception provided in case law and government appraisal standards is that in which there is the prospect of a nongovernment buyer for the property that is unrelated to the public project for which the land is being acquired. However, collusion can make it impossible to find an "arm's length preservation buyer."

Scope of project rule. One of the most critical determinations in applying a limited market model to the valuation of land for preservation use is whether the land was "probably within the scope of the project from the time the government was committed to it." All government agencies must contain a project boundary description and date on which the project has been certified. If land is adjacent to or near a designated public project area, the enhancement or diminution in value caused as a result of the public project can be considered on those parcels. This is shown on the accompanying diagram by the dotted line that connects the public use for preservation, the demand by a prospective arm's length preservation buyer, and the highest and best private market use of the land. Perhaps a more critical problem faced by appraisers is not whether the appraised property is within the scope of a public project, but whether the comparable sale properties are. This presents a possible insurmountable problem with the roaming actions of private and nonprofit preservation agencies that have no project boundaries and do not need to file environmental or economic impact reports.

Evidentiary blight. Under the project influence rule in government appraisal standards, appraisals are to exclude any influences of the public project on the value of the appraised property. However, when the value of the remainder of the property or a nearby property is diminished, there may be grounds for an inverse condemnation lawsuit. An example is precondemnation blight that affects the marketability or value of properties before the date of condemnation. Precondemnation blight usually manifests itself as a pall on sales activity. However, the law is silent on how to handle the case of evidentiary blight, an abundance of market data but few or none of the sales meets the tests of fair market value transactions.

Demand analysis. One approach to solving the dilemma of evidentiary blight is finding a surrogate market of properties in a market area unaffected by such interference in the workings of the market. However, this most often is impossible because the primary market area may comprise properties with unique ocean-, lake-, or riverfront land, or other irreplaceable natural attributes. Many of the properties along the California coastline, at Lake Tahoe along the Nevada-California border, or the Santa Monica Mountains Conservancy area near Los Angeles are examples of unique properties and designated preservation areas where a surrogate market would be difficult to find. All the measures to protect environmental resources eliminate the tiers of the market for development, speculation, investment holding, and even wealthy estate buyers. The result is that a limited market of public or private buyers, typically with little or no effective market demand beyond one buyer. This single-buyer market does not meet the conventional tests of market value, but may nonetheless be the only "market."

If there is a blight on valid sales evidence in a thin, vanishing, or environmentally embargoed land market, one possible way to appraise highly restricted land for its market value might be to ascertain that there is the prospect of demand by an arm's length special-purpose preservation buyer for the property unconnected with the government agency acquiring the property and outside the scope of the public project for which it is being acquired.

This method may comply with the Uniform Standards for Federal Land Acquisitions but may not comply with the Federal Interagency Land Acquisition Task Force position statement against concluding a highest and best use for preservation in a real estate appraisal and using preservation sales for the same. The reason for this conflict is that appraising natural resource land in thin, disappearing, or environmentally embargoed markets is like trying to fit a square peg into a round hole. The only method of appraising that is consonant with the limited market for such land is as a special-purpose property. Appraising land for preservation use in such beleaguered markets is an extraordinary situation that case law, appraisal standards, the appraisal industry, and government land acquisition procedures have not kept pace with.

Market value data availability. Even where it is supportable to conclude a limited-market demand for preservation in a real estate appraisal, an appraiser must still meet the market value standard. But the law is not tied down by an inflexible concept of market value as appraisal theory and standards are. Such sales must reflect transactions made by buyers at arm's length from a government preservation project and unrelated to the scope of the public project for which the property is being acquired. The sales must also not involve any illegitimate attempts to depress or inflate the sales price.

There are several problems with trying to find land sales data that are voluntary, arm's length, not under duress, and not project influenced. As noted, typically the few land sales that reflect legally defined sale conditions of market value are not comparable in terms of the unique physical features that the private market is willing to pay a premium for (e.g., ocean frontage or view, lake or river frontage or view, and wetlands). Flawed appraisals often result, which mistake the only available market evidence of inferior properties as proof of market value regardless of its comparability. Sales of inferior properties that do not have the critical physical amenities demanded by both the private market and preservationists are a poor reflection of market value.

CASE VIGNETTES OF PRESERVATION MARKET INTERFERENCE

The first example, a 3,000-acre ranch on the border of Orange County and San Diego County in Southern California, has been designated as habitat for the preservation of the gnat-catcher bird. About 2,000 acres of the ranch comprises steep unusable slopes. The remaining 1,000 acres of mostly level, usable land is entirely overgrown with the coastal sage scrub plant, the habitat for the gnatcatcher. The property is zoned for agricultural uses. To appraise such a property even for an agricultural use would be entirely hypothetical because environmental constraints effectively forbid such uses. An appraisal based on agricultural use would result in a paper value

that could not be actually realized in the market. Moreover, an appraisal may have to rely on pure agricultural land sales data from Imperial County some 200 miles away where there is no proximity to urban areas or the ocean. The preservation designation of the parcel has deterred speculators. A large aerospace contractor that formerly leased the site for a testing ground retains an appraiser to value the property. The aerospace contractor is a responsible party required under the law to clean the site of groundwater contamination. However, the gnat-catcher habitat is unaffected by the contamination. There is no real market demand for the property except by a preservation buyer. There is also no truly comparable market data available from which to derive a valid market value for the property.

A second example involves mountain land in the desert area of the Southwest and that has been designated for the preservation of the mountain goat habitat. No study has provided evidence that the habitat of the mountain goat is endangered or that the animal even inhabits the area. The land's market value runs between $200-$300 per acre with a modal value of $250 per acre. The Protected Lands Trust (PLAT), a conduit buyer for resale of the land to the government at its purchase price plus a mark-up fee, has been buying land for mountain goat habitat for $500 per acre. With the resources of the government behind it, the PLAT floods the market and drives up the going price for such land. Without the give and take of a market, the only limitation on price is the money supply of government agencies. Property owners will not sell their land for its open market value ($250 per acre), given the higher price that the PLAT is paying ($500 per acre). This effectively squelches any nonpreservation sales transactions and leads to a dearth of valid market data.

A different local government agency wants to buy a parcel of the land in the same area to mitigate environmental impact from its public project and cannot condemn the land. An appraiser is retained to appraise a suitable parcel of mitigation land. The seller will not accept anything less than the $500 per acre going price for a voluntary sale given the actions of the PLAT. The appraiser cannot find nonproject-influenced sales data outside the mountain goat habitat because the PLAT has monopolized the market. The appraiser uses the scant few older sales available and concludes $250 per acre. This appraisal is rejected by the PLAT because it cannot induce a voluntary sale. A second appraiser who is an expert in preservation value and willing to use the PLAT market data is retained. The transaction is ultimately consummated at the higher appraised valuation reflecting government-inflated prices. The first appraiser is no longer retained by PLAT for valuation assignments.

The third example, a five-acre steep hillside property, is an in-holding surrounded by a master-planned development for 90 estate lots on 180 acres in Greenville. The city's hillside development ordinance permits an overall density of 0.50 lots per gross acre. The hillside ordinance provides for the purchase of transfer development rights (TDRs) by developers from owners of small parcels and public utility parcels within the masterplanned area. The only condition of the donor parcels is that they remain as perpetual open space in return for higher density on the recipient parcel. At present, the property is economically infeasible to develop as a stand-alone parcel. The property could be developed by a custom estate lot owner-developer that would desire the view amenity regardless of production

costs. But such subeconomic use of the land would be highly speculative at present. Buyers desiring to hold the parcel as an investment for a future home site for retirement or development is another possible market. But the TDR program has effectively replaced the market for speculation and investment in land. The highest and best present use of the property is for the sale of development credits to the owner of the surrounding master-planned project. Thus, there is no market for the parcel without the surrounding complementary development. The owner of the one-acre inholding parcel is left hostage to a price that the developer is willing to pay for the TDR of about one-third of the price for similar speculative land. An expert appraiser is hired to value the five TDRs. The appraiser bases his opinion of value on the price paid for prior TDRs, without disclosing that such transfers reflect a "closed market" value.

"NATIONALIZED" PRESERVATION MARKETS

On the macroeconomic level, the reason that land suitable for environmental preservation has recently become so confusing and controversial to appraise is that this type of land has been principally downzoned to openspace use while the private sector preservation market has become organizationally extinct.2 This sector has been gradually replaced with a complex system of physical takings, land use regulations, and syndicated markets formed by nonprofit preservation organizations. The system has restricted free markets to accomplish environmental protection "at any cost." Attempts to replace a free market with artificial market-like mechanisms such as TDRs, environmental subdivisions, and mitigation credits is becoming recognized by the courts as regulatory takings. The establishment of habitat conservation plan areas (HCPs) is another such trend.24 Because HCPs are public projects, they eliminate any legal possibility of a private or a limited market for preservation within designated project areas. Paradoxically, they also eliminate the private market for preservation land from which buyers, sellers, and appraisers could evaluate its market value. As economist Tom Bethell has aptly pointed out, market value cannot be ascertained in socialized economic systems, or where the value of commodities such as land have been "nationalized"--a phenomenon in the most active markets for nature land in the United States.

The national controversy over the valuation of land for environmental protection has its origin in the complex system of environmental preservation. Various appraisal methods have been proposed to fill the void in the workings of a free market by those who are environmentally predisposed such as public interest value, mitigation banks, and contingent valuation. Other methods have been proposed by those who are more free market oriented that assert that the highest bids for comparable land suitable for preservation set its value regardless of who the buyer is.26 Countering these proposed solutions to the problem, government agencies and the appraisal industry have issued position statements that preservation c

annot be appraised for market value because it is a "noneconomic highest and best use."27 All of these approaches to the problem overlook the reality of thin markets for marginally productive land, disappearing markets for private preservation, markets dominated by nonprofit preservation land syndicates, blighted land sales data, and artificial market mechanisms for preservation. Ironically, those who most advocate for

the adoption of new valuation methods to preserve the environment are the ones who fail to recognize that the collaboration of government and private nonprofit environmental preservation organizations is what is preventing an autonomous market for such land to reemerge. The position statement issued by government wildlife agencies has likewise failed to consider that it is the regulatory actions of other levels of government in concert with environmentalists that has created artificial "noneconomic highest and best use" market mechanisms for preservation (TDRs, mitigation banks, environmental subdivisions, conservation easements, etc.).

A third-party model is the only known method of establishing a market for preservation land that is provided for in the law and consistent with appraisal theory. But even where there may be a third-party preservation buyer, there typically is no valid market data to value such land. It is unlikely that a limited market model will fully solve the valuation problem of natural resource land in such highly constrained markets because appraisals are no substitute for the workings of a market. This is why many enlightened government agencies are placing emphasis on negotiations rather than appraisals in the purchase of land for environmental preservation purposes in embargoed markets or where artificial preservation market mechanisms have been imposed. Government agencies that try to fit highly constrained, limited market properties in environmentally besieged markets into the land appraisal standards for fully open market properties may end up in bureaucratic and legal frustration. Public agencies may find themselves defending a position that is antithetical to constitutional protection or providing windfall compensation to property owners. In this sense, the controversy over how to value environmentally sensitive land cannot be resolved on methodological grounds alone but must recognize that the private preservation market unrelated to government activity must be restored.28

IMPLICATIONS FOR CONDEMNATION APPRAISAL

The following implications are offered for condemnation appraisal practice:

1. Before completing an appraisal, an appraiser may have to report to a public agency client that there is no effective market demand, only a preservation demand for the property, and that there is only inferior market evidence that can be used to appraise properties with significant natural amenities and that are desirable to both the private real estate market and preservationists.

2. Appraisers undertaking assignments for such land may need to turn to legal counsel before or during the appraisal about precondemnation blight on sales data, scope of the project rule, and the project influence rule. The general legal rule is that valid market demand for the appraised property outside the scope of the project for preservation must be considered.

3. Appraisers suspecting the type of market interference described in this article may need to inform their public agency clientele that they must first complete a market study to ascertain if there is any environmental blight in the market. Accordingly, appraisal contracts should include a phased scope of work so as to protect the appraiser from accusations of nonperformance if neither a market nor valid sales data can be found.

4. Many appraisers may want to reject such assignments altogether, given the frequent expectation by some government agencies and nature land trust conduits that appraisals incorporate higher purchase prices paid by government or quasi-government agencies to close deals.

5. Public agencies must realize that it is highly unlikely that appraisers can comply with government land appraisal standards in environmentally interfered markets unless they issue special instructions to the appraiser under the "Jurisdictional Exception" to the Uniform Standards of Professional Appraisal Practice.29

6. As they undertake the assignment, appraisers must inform their public agency clientele that such preservation mechanisms as TDRs, mitigation bank credits, environmental subdivisions, and conservation easements may not meet the full tests of legally defined market value.

7. Public agency review appraisers should be aware of the subtle appraisal flaw of mistaking the only available land sales data as proof of market value regardless of its physical and market comparability to the appraised property. Appraisers retained to value land for physical takings for preservation purposes need to be aware that the entire market may be blighted, resulting in misleading valuations.

Sidebar:

Some appraisers and land economists contend that the prices paid for dedicating conservation easements reflect the value of preservation land.
Sidebar:

TDRs and mitigation credits are noneconomic complements, not substitutes.

Sidebar:

In private preservation, property need not be legally zoned for such use and does not need to meet the conventional tests of economic feasibility.

Sidebar:

Under land use law, the local government can zone portions of property for open space as long as a viable economic use is left on the property.

Sidebar:

Attempts to replace a free market with artificial marketlike mechanisms is becoming recognized by the courts as regulatory takings.

Footnote:

1. Arthur O'Sullivan and Steven M. Sheffrin, Microeconomics (Englewood Cliffs, New Jersey: Prentice-Hall, 1998), 316-331.
2. Tim Herdt, "State May Get Land to Settle Tax Debt," Ventura County Star (August 9,1998): Al.

3. Donald C. Wilson, "How Tactical Utility Influences Price and Value," The Appraisal Journal (April 1998): 9S98.

4. Charles Warren, "Valuing Environmentally Sensitive Land," Real Estate Review (Spring 1998): 90-91.

Footnote:

5. Kinter v. United States, 156 E 2d 5, 7 (C.A. 3,1946).

6. The term "embargo" is used here to mean an all-out restriction on the trade of a good. See David Olander, Microeconomics, 3d ed. (Boston, Massachusetts: Irwin, 1998), 494.

7. For an overview of the noneconomic approaches to valuing nature land, see John Foster, Valuing Nature? (New York, New York: Routledge, 1997), 1-273.

8. United States v. Petty Motor Co., 327 U.S. 372, 377-378 (1946).

Footnote:
9. United States v Cors, 337 U.S. 325, 333-334 (1949).

10. David Michael Keating, Charles P. Edmonds, and Sarah W. Stanwick, "A Conceptual Approach to Appraising Wetland Mitigation Banks," The Appraisal Journal (April 1997):165-170.

11. Wayne C. Lusvardi, Letters to the Editor, "A Bankrupt Framework for the Valuation of Mitigation Bank Credits," The Appraisal Journal (October 1997): 426-430.

12. J. Black, A Dictionary of Economics (New York, New York: Oxford, 1997), 74.

13. Robert S. Pindyck and Daniel L. Rubinfeld, Microeconomics, 4th ed. (Englewood Cliffs, New Jersey: Prentice-Hall, 1998), 25-26.

14. John C. Danner, "TDRs---Great Idea But Questionable Value," The Appraisal Journal (April 1997): 133-142.

Footnote:

15. Suitum v. Tahoe Regional Planning Agency 117 S. Ct. 1659,137 LEd. 2d 980 (1997).
16. Danner, 139.

17. Roger Bate, Pick a Number: A Critique of Contingent Valuation and Its Application in Public Policy (Washington, D.C.: Competitive Enterprise Institute, 1993),1-28.

Footnote:

18. Interagency Land Acquisition Conference, Uniform Appraisal Standards for Federal Land Acquisitions (Washington, D.C.: 1992),10. See also United

States v. Chandler-Dunbar Co., 229 U.S. 53, 80-81 (1913); and United States v. 320 Acres of Land, 605 F.2d 762, n. 26, 811, n. 107 (Fifth Cir. 1979).

Footnote:

19. Kevin J. Coakley, Inverse Condemnation: The Search for the Relevant Parcel (New Jersey: Connell, Foley, and Geiser, LLP), 1-5.

20. California Land Surveyor's Association, "Environmental Subdivisions: Creation," Subdivision Map Act (Santa Rosa, California: CLSA, as amended January 1,1997), sec. 66418.2.

21. Interview with L. Simonek, environmental specialist, Metropolitan Water District of Southern California, Los Angeles, 1998.

22. Donald A. Hammer, Creating Freshwater Wetlands, 2d ed. (New York: Lewis Publishers, 1997), 338.

Footnote:

23. Victoria Edwards, Dealing in Diversity: America's Market for Nature Conservation (New York: Cambridge University Press, 1995), 155-166.

24. Timothy Beatley, Habitat Conservation Planning: Endangered Species and Urban Growth (Austin, Texas: University of Texas Press, 1994), 23-29.

25. Tom Bethel, The Noblest Triumph: Property and Prosperity Through the Ages (New York: St. Martin's Press, 1998),11. 26. Bill Mundy and William N. Kinnard, Jr., "The New Noneconomics: Public Interest Value, Market Value, and Economic Use,"

The Appraisal Journal (April 1998): 207-214.

27. Woodward S. Hanson, "Public Interest Value and Noneconomic Highest and Best Use: The Appraisal Institute's Position," Valuation Insights and Perspectives (Spring 1996): 28; Interagency Land Acquisition Conference. On the Issue of Whether a NonEconomic Highest and Best Use Can Be a Proper Basis for the Estimate of Market Value. Position paper, Washington, D.C., April 14, 1995.

Footnote:

28. Terry L. Anderson and Donald R. Leal, "Rekindling the Privatization Fires: Political Lands Revisited" in Terry L. Anderson, Breaking the Environmental Policy Gridlock (Stanford, California: Stanford University Hoover Press, 1997), 53-81. 29. The Appraisal Foundation,Uniform Standards of Professional Appraisal Practice(Washington, D.C.:The Appraisal Foundation,1998),7.

Reference:

REFERENCES

Reference:

Anderson, Terry L., and Donald L. Leal. 1991. Free Market Environmentalism.

San Francisco, California: Pacific Research Institute for Public Policy.

DeLong, James V. 1997. Property Matters: How Property Rights Are Under Assault-And Why You Should

Care. New York, New York: The Free Press.

DiMento, Joseph, ed. 1990. Wipeouts and Their Mitigation: The Changing Context for Land Use and Environmental Law. Cambridge, Massachusetts: Lincoln Institute of Land Policy.

Reference:

Epstein, Richard A. 1985. Takings: Private Property Rights and the Power of Eminent Domain. Cambridge, Massachusetts: Harvard University Press.

Fischel, William A. 1995. Regulatory Takings: Law, Economics, and Politics. Cambridge, Massachusetts:

Harvard University Press.

Gallies, David L. ed. 1993. After Lucas: Land Use Regulation and the Taking of Property Without Compensation. Chicago, Illinois: American Bar Association.

Pollot, Mark L. 1993. Grand Theft and Petit Larceny: Property Rights in America. San Francisco, California: Pacific Research Institute for Public Policy.

Author Affiliation:

Wayne Lusvardi is senior real estate representative with the Metropolitan Water District of Southern California. He earned a BA in demography from Aurora University, Aurora, Illinois. Contact: MWD; R 0. Box 54153; Mail Drop 3-215; Los Angeles, CA 90054. (213) 217-7661. Fax 217-7650.

THIS IS THE FULL-TEXT.

Geographic Names: US

Descriptors: Land use; Valuation; Nature; Real estate appraisal; Preservation; Models; Studies
Classification Codes: 9190 (CN=United States); 1540 (CN=Pollution control); 8360 (CN=Real estate) ; 9130 (CN=Experimental/Theoretical)

Subject Search: 09/819159; patent literature; full text

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Set     Items   Description
S1    1464047   S ECOSYSTEM? ? OR ENVIRONMENT?? OR NATURE OR AIR OR WATER OR GROUNDWATER
OR WATERTABLE OR ATMOSPHER?? OR HABITAT OR ENVIRONMENTAL? OR CONSERVATION OR ECOLOG? OR
(ECO OR RESOURCE)()FRIENDLY OR BIONOMIC?? OR BIOGEOCHEMICAL OR ECOPHAGY OR
GREEN()ECONOMIC? ? OR BIOCENOSE OR BIOSPHERE
S2         39   S S1(5N)((FREE OR OPEN)()MARKET? ? OR CAPITALISM OR PRIVATI? OR
LAISSEZ()FAIRE OR (COMPETITIVE OR NASH OR INTERTEMPORAL OR ECONOMIC)()EQUILIBRIUM)
S3     356201   S S1(5N)(MANAGEMENT OR MANAG??? OR TRACK??? OR SUPERVIS??? OR REGULAT???
OR OVERSEE??? OR OVERSIGHT OR ADMINISTRATION OR DIRECT??? OR ORGANIZ? OR ORGANIS? OR
CONTROL OR CONTROLS OR CONTROLL? OR GOVERN??? OR MONITOR??? OR ENFORC? OR RESTRICT??? OR
OPERAT???)
S4     929187   S VALUE OR VALUATION OR APPRAIS?? OR ASSESS? OR (ESTIMAT??? OR DETERMIN?
OR EVALUAT?)(2N)(WORTH OR COST? ? OR PRODUCTION OR PERFORM? OR OPERAT? OR ACCOMPLISH? OR
FUNCTION? OR PRACTIC? OR CONDUCT OR ACHIEV?)
S5      53550   S S4(5N)(ASSETS OR ASSET OR PROPERT??? OR ANNUIT??? OR EARNINGS OR INCOME
OR INTEREST OR RETURN OR RETURNS OR PROFIT OR PROFITS OR GAIN OR GAINS OR RESOURCES OR
CAPITAL OR MONEY OR MONIES OR DIVIDEND OR DIVIDENDS OR COMMODIT???)
S6         29   S S2 AND S3
S7         14   S S6 AND S5
S8          7   S S7 AND IC=G06F?
S9          7   IDPAT (sorted in duplicate/non-duplicate order)
S10         7   IDPAT (primary/non-duplicate records only)
S11         2   S S2(S)S5
S12         1   S S11 NOT S10
S13         0   S S12 AND IC=G06F?
S14        27   S S6 AND S4
S15        14   S S14 AND IC=G06F?
S16         7   S S15 NOT S10
S17         7   IDPAT (sorted in duplicate/non-duplicate order)
S18         6   IDPAT (primary/non-duplicate records only)
S19         0   S S18 NOT AD=20000401:20071230
 ; show files
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[File 348] **EUROPEAN PATENTS** 1978-2007/ 200751

**File 348: For important information about IPCR/8 and forthcoming changes to the IC= index, see HELP NEWSIPCR.*

[File 349] **PCT FULLTEXT** 1979-2007/UB=20071227UT=20071120

**File 349: For important information about IPCR/8 and forthcoming changes to the IC= index, see HELP NEWSIPCR.*

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10/5/1 (Item 1 from file: 349) **Links**

PCT FULLTEXT

01245680

SYSTEM AND METHOD FOR EXECUTING AN APPLICATION ON A SECURED RUN-TIME ENVIRONMENT

SYSTEME ET PROCEDE POUR L'EXECUTION D'UNE APPLICATION SUR UN ENVIRONNEMENT DE TEMPS D'EXECUTION SECURISE

Patent Applicant/Patent Assignee:

- **SOFT-ON-NET**; 601-2 Korea World Trade Center, 159-1, Samsung-dong, Kangnam-gu, Seoul 135-090 KR; KR(Residence); KR(Nationality)
  (For all designated states except: US)
- **et.al.**
-

Patent Applicant/Inventor:

- **SONG Dong-Ho**
  Sunkyung A.P.T. 10-1201, Dae-chi Dong 506-Kangnam Ku, Seoul; KR; KR(Residence); KR(Nationality); (Designated only for: US)
- **et. al.**

	Country	Number	Kind	Date
Patent	WO	200552762	A2	20050609
Application	WO	2004US39548		20041122
Priorities	US	2003718867		20031121

English Abstract:

An application wrapper system and method provide a technique for privatizing application software resources from an operating system shared resources. The present invention allows the application software to execute in a secured run-time environment. The preferred embodiments of the present invention eliminates application conflict, protects operating system resources, provides multiple instance run-time for instance made to execute single instance and provides multi-user environment.

10/5/2 (Item 2 from file: 349) **Links**
PCT FULLTEXT

00943642
FREE-MARKET ENVIRONMENTAL MANAGEMENT SYSTEM HAVING INSURED CERTIFICATION TO A PROCESS STANDARD
SYSTEME DE GESTION ECOLOGIQUE LIBERALE CERTIFIE CONFORME A UNE NORME
Patent Applicant/Inventor:

- **VANDE POL Mark E**
  25150 Mountain Charlie Road, Los Gatos, CA 95033-8320; US; US(Residence); US(Nationality);

	Country	Number	Kind	Date
Patent	WO	200277776	A2	20021003
Application	WO	2002US9530		20020327
Priorities	US	2001819159		20010327

English Abstract:

Environmental regulation by government is structurally incapable of satisfying its mandate. The present invention

is an alternative, free-market management system designed to deliver a superior product, at lower cost, with an insured guarantee, and without regulatory oversight by government. The system uses an insured, certified best-practice form of process certification that objectively accounts the financial **value** of ecosystem **resources**. The conduct of practice within the system accounts the price of assets at risk and characterizes their function by which to market them for their ability to offset the environmental impacts of industrial, commercial, and residential activities.

10/5/3 (Item 3 from file: 349) **Links**
PCT FULLTEXT

00806392
TECHNOLOGY SHARING DURING ASSET MANAGEMENT AND ASSET TRACKING IN A NETWORK-BASED SUPPLY CHAIN ENVIRONMENT AND METHOD THEREOF
PARTAGE TECHNOLOGIQUE LORS DE LA GESTION ET DU SUIVI DU PARC INFORMATIQUE DANS UN ENVIRONNEMENT DU TYPE CHAINE D'APPROVISIONNEMENT RESEAUTEE, ET PROCEDE ASSOCIE
Patent Applicant/Patent Assignee:

- **ACCENTURE LLP**; 1661 Page Mill Road, Palo Alto, CA 94304
  US; US(Residence); US(Nationality)

	Country	Number	Kind	Date
Patent	WO	200139086	A2	20010531
Application	WO	2000US32310		20001122
Priorities	US	99444653		19991122
	US	99447623		19991122

10/5/4 (Item 4 from file: 349) **Links**
PCT FULLTEXT

00806389
SCHEDULING AND PLANNING BEFORE AND PROACTIVE MANAGEMENT DURING MAINTENANCE AND SERVICE IN A NETWORK-BASED SUPPLY CHAIN ENVIRONMENT
PROGRAMMATION ET PLANIFICATION ANTICIPEE, ET GESTION PROACTIVE AU COURS DE LA MAINTENANCE ET DE L'ENTRETIEN D'UN ENVIRONNEMENT DU TYPE CHAINE D'APPROVISIONNEMENT RESEAUTEE
Patent Applicant/Patent Assignee:

- **ACCENTURE LLP**; 1661 Page Mill Road, Palo Alto, CA 94304
  US; US(Residence); US(Nationality)

	Country	Number	Kind	Date
Patent	WO	200139082	A2	20010531
Application	WO	2000US32228		20001122
Priorities	US	99447625		19991122

	US	99444889		19991122

French Abstract:

L'invention concerne un systeme, un procede, et un article manufacture de gestion proactive mis en oeuvre au cours de la maintenance et de l'entretien d'un environnement du type chaine d'approvisionnement reseautee. Les appels telephoniques, les donnees et autres informations multimedia sont routes via un reseau assurant le transfert des informations via Internet au moyen d'informations de routage telephonique et d'informations d'adresse de protocole Internet. Ledit reseau comprend un gestionnaire de seuil proactif qui avertit a l'avance les fournisseurs d'une rupture de contrat imminente. Ledit gestionnaire de seuil proactif envoie une alarme au fournisseur de services lorsque le niveau de service du moment n'atteint plus le niveau de service determine dans le contrat en termes de maintien d'un certain niveau de service.

10/5/5 (Item 5 from file: 349) **Links**
PCT FULLTEXT

00806384
NETWORK AND LIFE CYCLE ASSET MANAGEMENT IN AN E-COMMERCE ENVIRONMENT AND METHOD THEREOF
GESTION D'ACTIFS DURANT LE CYCLE DE VIE ET EN RESEAU DANS UN ENVIRONNEMENT DE COMMERCE ELECTRONIQUE ET PROCEDE ASSOCIE
Patent Applicant/Patent Assignee:

- **ACCENTURE LLP**; 1661 Page Mill Road, Palo Alto, CA 94304
  US; US(Residence); US(Nationality)

	Country	Number	Kind	Date
Patent	WO	200139030	A2	20010531
Application	WO	2000US32324		20001122
Priorities	US	99444775		19991122
	US	99447621		19991122

10/5/6 (Item 6 from file: 349) **Links**
PCT FULLTEXT

00806383
COLLABORATIVE CAPACITY PLANNING AND REVERSE INVENTORY MANAGEMENT DURING DEMAND AND SUPPLY PLANNING IN A NETWORK-BASED SUPPLY CHAIN ENVIRONMENT AND METHOD THEREOF
PLANIFICATION EN COLLABORATION DES CAPACITES ET GESTION ANTICIPEE DES STOCKS LORS DE LA PLANIFICATION DE L'OFFRE ET DE LA DEMANDE DANS UN ENVIRONNEMENT DE CHAINE D'APPROVISIONNEMENT FONDEE SUR LE RESEAU ET PROCEDE ASSOCIE
Patent Applicant/Patent Assignee:

- **ACCENTURE LLP**; 1661 Page Mill Road, Palo Alto, CA 94304

US; US(Residence); US(Nationality)

	Country	Number	Kind	Date
Patent	WO	200139029	A2	20010531
Application	WO	2000US32309		20001122
Priorities	US	99444655		19991122
	US	99444886		19991122

10/5/7 (Item 7 from file: 349) **Links**
PCT FULLTEXT

00806382
METHOD FOR AFFORDING A MARKET SPACE INTERFACE BETWEEN A PLURALITY OF MANUFACTURERS AND SERVICE PROVIDERS AND INSTALLATION MANAGEMENT VIA A MARKET SPACE INTERFACE
PROCEDE DE MISE A DISPOSITION D'UNE INTERFACE D'ESPACE DE MARCHE ENTRE UNE PLURALITE DE FABRICANTS ET DES FOURNISSEURS DE SERVICES ET GESTION D'UNE INSTALLATION VIA UNE INTERFACE D'ESPACE DE MARCHE
Patent Applicant/Patent Assignee:

- **ACCENTURE LLP**; 1661 Page Mill Road, Palo Alto, CA 94304
  US; US(Residence); US(Nationality)

	Country	Number	Kind	Date
Patent	WO	200139028	A2	20010531
Application	WO	2000US32308		20001122
Priorities	US	99444773		19991122
	US	99444798		19991122

French Abstract:

On decrit un systeme, un procede et un article manufacture qui constituent une structure de chaine d'approvisionnement fondee sur le reseau. L'installation d'un service est geree au moyen d'un reseau. La demande et l'approvisionnement des offres de fabricant sont planifies au moyen du reseau et les commandes relatives aux offres du fabricant sont egalement gerees au moyen du reseau. Le reseau est egalement utilise pour gerer les actifs sur le reseau, y compris pour effectuer la maintenance et le service pour les actifs de reseau au moyen du reseau.

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Subject Search: 09/819159; non patent literature; abstracts/bibliographic

Set     Items   Description
S1    3032606   S ECOSYSTEM? ? OR ENVIRONMENT?? OR NATURE OR AIR OR WATER OR GROUNDWATER
OR WATERTABLE OR ATMOSPHER?? OR HABITAT OR ENVIRONMENTAL? OR CONSERVATION OR ECOLOG? OR
(ECO OR RESOURCE)()FRIENDLY OR BIONOMIC?? OR BIOGEOCHEMICAL OR ECOPHAGY OR
GREEN()ECONOMIC? ? OR BIOCENOSE OR BIOSPHERE
S2       2555   S S1(5N)((FREE OR OPEN)()MARKET? ? OR CAPITALISM OR PRIVATI? OR
LAISSEZ()FAIRE OR (COMPETITIVE OR NASH OR INTERTEMPORAL OR ECONOMIC)()EQUILIBRIUM)
S3     340637   S S1(5N)(MANAGEMENT OR MANAG??? OR TRACK??? OR SUPERVIS??? OR REGULAT???
OR OVERSEE??? OR OVERSIGHT OR ADMINISTRATION OR DIRECT??? OR ORGANIZ? OR ORGANIS? OR
CONTROL OR CONTROLS OR CONTROLL? OR GOVERN??? OR MONITOR??? OR ENFORC? OR RESTRICT??? OR
OPERAT???)
S4    1614481   S VALUE OR VALUATION OR APPRAIS?? OR ASSESS? OR (ESTIMAT??? OR DETERMIN?
OR EVALUAT?)(2N)(WORTH OR COST? ? OR PRODUCTION OR PERFORM? OR OPERAT? OR ACCOMPLISH? OR
FUNCTION? OR PRACTIC? OR CONDUCT OR ACHIEV?)
S5      62109   S S4(5N)(ASSETS OR ASSET OR PROPERT??? OR ANNUIT??? OR EARNINGS OR INCOME
OR INTEREST OR RETURN OR RETURNS OR PROFIT OR PROFITS OR GAIN OR GAINS OR RESOURCES OR
CAPITAL OR MONEY OR MONIES OR DIVIDEND OR DIVIDENDS OR COMMODIT???)
S6        744   S S2 AND S3
S7         11   S S6 AND S5
S8          9   S S7 NOT PY>2000
S9          9   RD  (unique items)
S10        24   S S2 AND S5
S11        20   S S10 NOT PY>2000
S12        20   RD  (unique items)
S13        11   S S12 NOT S9
S14        32   S S2(10N)S4
S15        18   S S14 NOT PY>2000
S16        18   RD  (unique items)
S17        16   S S16 NOT (S13 OR S9)
S18        27   S ((ECOSYSTEM? ? OR ENVIRONMENT?? OR HABITAT OR ENVIRONMENTAL? OR
CONSERVATION OR ECOLOG? OR GREEN()ECONOMIC? ?)(4N)((FREE OR OPEN)()MARKET? ? OR PRIVATI?
OR (COMPETITIVE OR NASH OR INTERTEMPORAL OR ECONOMIC)()EQUILIBRIUM))(4N)(MANAGEMENT OR
MANAG??? OR SUPERVIS??? OR OVERSEE??? OR ADMINISTRATION OR OPERAT???)
S19        19   S S18 NOT PY>2000
S20        18   RD  (unique items)
S21        18   S S20 NOT (S17 OR S13 OR S9)
 ; show files
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[File 2] **INSPEC** 1898-2007/Dec W2

[File 35] **Dissertation Abs Online** 1861-2007/Oct

[File 65] **Inside Conferences** 1993-2007/Dec 31

[File 99] **Wilson Appl. Sci & Tech Abs** 1983-2007/Oct

[File 474] **New York Times Abs** 1969-2007/Dec 29

[File 475] **Wall Street Journal Abs** 1973-2007/Dec 29

Subject Search: 09/819159; non patent literature; full text #1

Set Items Description
S1 8422388 S ECOSYSTEM? ? OR ENVIRONMENT?? OR NATURE OR AIR OR WATER OR GROUNDWATER OR WATERTABLE OR ATMOSPHER?? OR HABITAT OR ENVIRONMENTAL? OR CONSERVATION OR ECOLOG? OR (ECO OR RESOURCE)()FRIENDLY OR BIONOMIC?? OR BIOGEOCHEMICAL OR ECOPHAGY OR GREEN()ECONOMIC? ? OR BIOCENOSE OR BIOSPHERE
S2 15097 S S1(5N)((FREE OR OPEN)()MARKET? ? OR CAPITALISM OR PRIVATI? OR LAISSEZ()FAIRE OR (COMPETITIVE OR NASH OR INTERTEMPORAL OR ECONOMIC)()EQUILIBRIUM)
S3 1398468 S S1(5N)(MANAGEMENT OR MANAG??? OR TRACK??? OR SUPERVIS??? OR REGULAT??? OR OVERSEE??? OR OVERSIGHT OR ADMINISTRATION OR DIRECT??? OR ORGANIZ? OR ORGANIS? OR CONTROL OR CONTROLS OR CONTROLL? OR GOVERN??? OR MONITOR??? OR ENFORC? OR RESTRICT??? OR OPERAT???)
S4 5559578 S VALUE OR VALUATION OR APPRAIS?? OR ASSESS? OR (ESTIMAT??? OR DETERMIN? OR EVALUAT?)(2N)(WORTH OR COST? ? OR PRODUCTION OR PERFORM? OR OPERAT? OR ACCOMPLISH? OR FUNCTION? OR PRACTIC? OR CONDUCT OR ACHIEV?)
S5 1008625 S S4(5N)(ASSETS OR ASSET OR PROPERT??? OR ANNUIT??? OR EARNINGS OR INCOME OR INTEREST OR RETURN OR RETURNS OR PROFIT OR PROFITS OR GAIN OR GAINS OR RESOURCES OR CAPITAL OR MONEY OR MONIES OR DIVIDEND OR DIVIDENDS OR COMMODIT???)
S6 3228 S S2(S)S3
S7 16 S S6(S)S5
S8 1 S S7 NOT PY>2000
S9 61 S S2(S)S5
S10 18 S S9 NOT PY>2000
S11 18 RD (unique items)
S12 97 S ((ECOSYSTEM? ? OR ENVIRONMENT?? OR HABITAT OR ENVIRONMENTAL? OR CONSERVATION OR ECOLOG? OR GREEN()ECONOMIC? ?)(3N)((FREE OR OPEN)()MARKET? ? OR PRIVATI? OR (COMPETITIVE OR NASH OR INTERTEMPORAL OR ECONOMIC)()EQUILIBRIUM))(3N)(MANAGEMENT OR MANAG??? OR SUPERVIS??? OR OVERSEE??? OR ADMINISTRATION OR OPERAT???)
S13 37 S S12 NOT PY>2000
S14 35 RD (unique items)
S15 35 S S14 NOT S11

? show files

[File 20] **Dialog Global Reporter** 1997-2007/Dec 31

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8/3,K/1 **Links**
Dialog Global Reporter

06154253 **(USE FORMAT 7 OR 9 FOR FULLTEXT)**
Airlines fly high on technology
STUART MACKENZIE
LLOYDS LIST
July 10, 1999
Journal Code: FLL **Language:** English **Record Type:** FULLTEXT
Word Count: 1252

...the often unsatisfactory reply were new 'Open Skies' policies, the recession, aircraft and airport improvements, **air** traffic **control** advances, **privatisation** - and the emergence of a new breed of innovative entrepreneurs who challenged the status quo...

Subject Search; 09/819159; non patent literature; full text #2

Set Items Description
S1 3387352 S ECOSYSTEM? ? OR ENVIRONMENT?? OR NATURE OR AIR OR WATER OR GROUNDWATER OR WATERTABLE OR ATMOSPHER?? OR HABITAT OR ENVIRONMENTAL? OR CONSERVATION OR ECOLOG? OR (ECO OR RESOURCE)()FRIENDLY OR BIONOMIC?? OR BIOGEOCHEMICAL OR ECOPHAGY OR GREEN()ECONOMIC? ? OR BIOCENOSE OR BIOSPHERE
S2 8656 S S1(5N)((FREE OR OPEN)()MARKET? ? OR CAPITALISM OR PRIVATI? OR LAISSEZ()FAIRE OR (COMPETITIVE OR NASH OR INTERTEMPORAL OR ECONOMIC)()EQUILIBRIUM)
S3 672586 S S1(5N)(MANAGEMENT OR MANAG??? OR TRACK??? OR SUPERVIS??? OR REGULAT??? OR OVERSEE??? OR OVERSIGHT OR ADMINISTRATION OR DIRECT??? OR ORGANIZ? OR ORGANIS? OR CONTROL OR CONTROLS OR CONTROLL? OR GOVERN??? OR MONITOR??? OR ENFORC? OR RESTRICT??? OR OPERAT???)
S4 2815272 S VALUE OR VALUATION OR APPRAIS?? OR ASSESS? OR (ESTIMAT??? OR DETERMIN? OR EVALUAT?)(2N)(WORTH OR COST? ? OR PRODUCTION OR PERFORM? OR OPERAT? OR ACCOMPLISH? OR FUNCTION? OR PRACTIC? OR CONDUCT OR ACHIEV?)
S5 383992 S S4(5N)(ASSETS OR ASSET OR PROPERT??? OR ANNUIT??? OR EARNINGS OR INCOME OR INTEREST OR RETURN OR RETURNS OR PROFIT OR PROFITS OR GAIN OR GAINS OR RESOURCES OR CAPITAL OR MONEY OR MONIES OR DIVIDEND OR DIVIDENDS OR COMMODIT???)
S6 2006 S S2(S)S3
S7 9 S S6(S)S5
S8 4 S S7 NOT PY>2000
S9 4 RD (unique items)
S10 14 S S2(10N)S5
S11 11 S S10 NOT PY>2000
S12 11 RD (unique items)
S13 9 S S12 NOT S9
S14 39 S S2(2N)S4
S15 29 S S14 NOT PY>2000
S16 29 RD (unique items)
S17 27 S S16 NOT (S13 OR S9)
S18 109 S ((ECOSYSTEM? ? OR ENVIRONMENT?? OR HABITAT OR ENVIRONMENTAL? OR CONSERVATION OR ECOLOG? OR GREEN()ECONOMIC? ?)(3N)((FREE OR OPEN)()MARKET? ? OR PRIVATI? OR (COMPETITIVE OR NASH OR INTERTEMPORAL OR ECONOMIC)()EQUILIBRIUM))(3N)(MANAGEMENT OR MANAG??? OR SUPERVIS??? OR OVERSEE??? OR ADMINISTRATION OR OPERAT???)
S19 82 S S18 NOT PY>2000
S20 81 RD (unique items)
S21 81 S S20 NOT (S17 OR S13 OR S9)
; show files

[File 15] **ABI/Inform(R)** 1971-2007/Dec 29

[File 610] **Business Wire** 1999-2007/Dec 31

**File 610: File 610 now contains data from 3/99 forward. Archive data (1986-2/99) is available in File 810.*

[File 810] **Business Wire** 1986-1999/Feb 28

[File 476] **Financial Times Fulltext** 1982-2007/Dec 29

[File 613] **PR Newswire** 1999-2007/Dec 31

Subject search; 09/819159; non patent literature; full text # 3

Set Items Description
S1 8718822 S ECOSYSTEM? ? OR ENVIRONMENT?? OR NATURE OR AIR OR WATER OR GROUNDWATER OR WATERTABLE OR ATMOSPHER?? OR HABITAT OR ENVIRONMENTAL? OR CONSERVATION OR ECOLOG? OR (ECO OR RESOURCE)()FRIENDLY OR BIONOMIC?? OR BIOGEOCHEMICAL OR ECOPHAGY OR GREEN()ECONOMIC? ? OR BIOCENOSE OR BIOSPHERE
S2 12211 S S1(5N)((FREE OR OPEN)()MARKET? ? OR CAPITALISM OR PRIVATI? OR LAISSEZ()FAIRE OR (COMPETITIVE OR NASH OR INTERTEMPORAL OR ECONOMIC)()EQUILIBRIUM)
S3 1600894 S S1(5N)(MANAGEMENT OR MANAG??? OR TRACK??? OR SUPERVIS??? OR REGULAT??? OR OVERSEE??? OR OVERSIGHT OR ADMINISTRATION OR DIRECT??? OR ORGANIZ? OR ORGANIS? OR CONTROL OR CONTROLS OR CONTROLL? OR GOVERN??? OR MONITOR??? OR ENFORC? OR RESTRICT??? OR OPERAT???)
S4 6595515 S VALUE OR VALUATION OR APPRAIS?? OR ASSESS? OR (ESTIMAT??? OR DETERMIN? OR EVALUAT?)(2N)(WORTH OR COST? ? OR PRODUCTION OR PERFORM? OR OPERAT? OR ACCOMPLISH? OR FUNCTION? OR PRACTIC? OR CONDUCT OR ACHIEV?)
S5 771992 S S4(5N)(ASSETS OR ASSET OR PROPERT??? OR ANNUIT??? OR EARNINGS OR INCOME OR INTEREST OR RETURN OR RETURNS OR PROFIT OR PROFITS OR GAIN OR GAINS OR RESOURCES OR CAPITAL OR MONEY OR MONIES OR DIVIDEND OR DIVIDENDS OR COMMODIT???)
S6 2824 S S2(S)S3
S7 16 S S6(S)S5
S8 10 S S7 NOT PY>2000
S9 10 RD (unique items)
S10 18 S S2(10N)S5
S11 13 S S10 NOT PY>2000
S12 11 RD (unique items)
S13 10 S S12 NOT S9
S14 72 S S2(5N)S4
S15 52 S S14 NOT PY>2000
S16 46 RD (unique items)
S17 44 S S16 NOT (S13 OR S9)
S18 140 S ((ECOSYSTEM? ? OR ENVIRONMENT?? OR HABITAT OR ENVIRONMENTAL? OR CONSERVATION OR ECOLOG? OR GREEN()ECONOMIC? ?)(3N)((FREE OR OPEN)()MARKET? ? OR PRIVATI? OR (COMPETITIVE OR NASH OR INTERTEMPORAL OR ECONOMIC)()EQUILIBRIUM))(3N)(MANAGEMENT OR MANAG??? OR SUPERVIS??? OR OVERSEE??? OR ADMINISTRATION OR OPERAT???)
S19 0 S S18(S)S5
S20 8 S S18(S)S4
S21 2 S S20 NOT PY>2000
S22 2 RD (unique items)
S23 1 S S22 NOT (S17 OR S13 OR S9)
; show files

[File 9] **Business & Industry(R)** Jul/1994-2007/Dec 20

[File 275] **Gale Group Computer DB(TM)** 1983-2007/Dec 25

[File 621] **Gale Group New Prod.Annou.(R)** 1985-2007/Dec 18

[File 636] **Gale Group Newsletter DB(TM)** 1987-2007/Dec 25

[File 16] **Gale Group PROMT(R)** 1990-2007/Dec 21

@PJL SET JOBATTR="JobAcct1=ecolbert1"
@PJL SE

01144200/9 **Links**
Gale Group Newsletter DB(TM)

01144200 **Supplier Number:** 40930398 **(THIS IS THE FULLTEXT)**

BRITAIN SHOULD INCLUDE ENVIRONMENTAL COSTS IN PRICES OF PRODUCTION: STUDY

Multinational Environmental Outlook , v 15 , n 18 , p N/A
Sept 5 , 1989
ISSN: 0899-5079
Language: English **Record Type:** Fulltext
Document Type: Magazine/Journal ; Trade
Word Count: 413
Text:

Environmental assets should be incorporated into national accounts, and taxes should be imposed on products or processes that are environmentally unfriendly, according to a report from a special adviser to the British environment secretary. A depletion of resources and loss of amenities would be classified as a reduction in the environment's gross domestic product (GDP).

The report, "Sustainable Development," argues that calculations of national assets should include "environmental capital" as well as man-made capital. Environmental capital includes fuels, minerals, waste-assimilating capacity of rivers and the biodiversity of nature, said David Pierce, director of the London Environment Economic Centre.

The traditional approach to environmental protection has been to exercise control through regulation, but Pierce argues that market forces should be used. A free market treats environmental resources as if they have zero price. Pierce says economic tools exist to apply costs-benefit analysis to the resources and their value should be incorporated in the price of man-made production.

Government Needs Pollution Taxes, Permits

The government could sell pollution permits and apply pollution taxes to regenerate environmental resources, the study says. The government, for example, could sell permits to dump effluent into rivers, and firms would have to incorporate the cost in the price of their output, forcing them to carefully calculate the effect of the increase in price. This way the government will have the funds to restore river quality, Pierce explained.

A hydrocarbon tax could pay for the work necessary to compensate for the ravages of acid rain and global warming, the report notes. "There is a vital and urgent need to integrate environmental impacts into our measures of economic progress," the report states.

Calculation of the GDP should be adjusted to deduct the costs of environmental damage and investments to prevent such damage, and to incorporate depreciation of environmental assets. "Sustainable development means changing the signals given to economic decision-makers: from politician and civil servant to minister, from industrialist to consumer,"

the report says. "It does not mean leaving the environment to market forces."

The opposition Labour Party has described the concept as little different from its policy of considering "social cost" in development. It argues that using tax rather than regulation is wrong. "Taxing a nitrate-fed carrot until it costs more than an organic one is plain daft," said David Blunkett, Labour's environmental spokesman. "Better to give financial incentives to organic farms and to set strict limits that would outlaw fertilizer or pesticide misuse."

Author: Robert McDonald

Subscription $295 per year plus postage as of 1/90. Published biweekly. Contact BPI, 951 Pershing Dr., Silver Spring, MD 20910-4464. Phone (301) 587-6300. FAX (301) 587-1081.

Publisher Name: Business Publishers, Inc.
Industry Names: BUSN (Any type of business); ENV (Environment)

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Valuing nature land in extinct markets

Lusvardi, Wayne
Appraisal Journal v67n3 pp: 293-305
Jul 1999
CODEN: APPJA5
ISSN: 0003-7087 **Journal Code:** APJ
Document Type: Journal article **Language:** English **Length:** 13 Pages
Special Feature: Charts Graphs References
Word Count: 7807

Abstract:

The interference with open markets for marginally economic land in environmental preservation areas has created blighted markets. As a result, limited data are available to determine market value and market demand for uses other than preservation are limited. Alternative valuation methods that have been proposed to fill this void are inconsistent with the concept of market value. In such cases, government land appraisal standards provide for a limited market approach for preservation by buyers other than the government agency acquiring the property. However, the same market conditions that result in blighted market conditions also eliminate private demand for preservation.

Text:

Headnote:

The interference with open markets for marginally economic land In environmental preservation areas has created blighted markets. As a result, limited data are available to determine market value, and market demand for uses other than preservation are limited. The author contends that altemative valuation methods that have been proposed to fill this void are inconsistent with the concept of market value. In such cases, government land appraisal standards provide for a limited market approach for preservation by buyers other than the government agency acquiring the property. However, the same market conditions that result in blighted market conditions also eliminate private demand for preservation.

A paradox in the appraisal of land suitable for environmental preservation in areas of sensitive natural resources is that there is a lack of open market value sales transactions but an abundance of nonmarket value sales

evidence, which cannot be used in an appraisal.

This situation often occurs where land is downzoned to marginally economic use, a result of pressure by interest groups to protect sensitive habitat and resources. Typically there is no compensation for such a regulatory taking. But if a nonprofit preservation agency voluntarily acquires the land, the transaction price may be predicated on the old zoning or may reflect a nonmarket premium to mitigate the effects of the regulatory action and to bring about a sale. However, if a government agency decides to condemn the land, then land appraisal standards and guidelines will prevail and the sales prices from such preservation purchases will be excluded as nonmarket value transactions or project-influenced sales. This situation is often called a "windfall or wipeout" system of compensation.

Because of the intervention of government and preservationists to protect the physical environment, the market for land with sensitive natural resources in some areas is thin or is disappearing. The number of land acquisitions by government and nonprofit preservation organizations is crowding out the market in some areas to the point that there is no longer enough valid information for buyers and sellers to make informed choices and for markets to run smoothly. In such thin or disappearing market conditions, the most unique, high-quality land will be sold in small numbers, mainly to government agencies or nonprofit preservation organizations and land identified as less critical may not be sold at all. As economists Arthur O'Sullivan and Steven Sheffrin point out, where there is a breakdown in market information for any economic good, buyers and sellers are unable to distinguish between the prices for lowand high-quality properties, and the private market demand for high-quality goods disappears.1
What is often unrecognized by real estate appraisers in active preservation market areas is that seemingly normal private sales transactions, not just government land acquisitions, are affected by both public and private measures to preserve the environment. This extends beyond the impact of downzoning that is noncompensable under existing law. The cumulative effect of various measures to protect the environment reduces the amount of competition for environmentally sensitive land, mostly to a tier of limited market and nonmarket buyers. The market for the land identified to contain the most sensitive environmental resources may be reduced to only government and nonprofit preservation organizations that may exert embargo-like conditions on the transaction of such properties. Examples of such interference in the market, especially on high-quality properties in the land market are:

1. Targeted preemptive purchase by nonprofit preservation trusts of lands with high-quality natural amenities desired by both the market (e.g., waterfront land, view, and buffer) and preservationists (e.g., ocean, lake, riparian land, view shed for ecotourism, and buffer).

2. Actual or the threat of government condemnation actions of land with the most critical environmental resources.

3. Pyramid sales from nonprofit conservation trusts to government agencies and other forms of collusion.
4. The practice of private preservation trusts to steer private

nondevelopment buyers to properties with sensitive natural resources.

5. Legislation authorizing debt-for-land swaps, allowing tax-defaulted land to be deeded to the state for preservation instead of sold in the open market.2

6. Imposed transfer of development rights in designated preservation areas, resulting in the affected properties' lack of marketability.

7. Owner's dedicating conservation easements to properties containing less critical environmental resources where no public or nonprofit buyer can be found for the property so that it is a stranded asset.

8. Lawsuits challenging environmental impact reports on proposed land developments even at low densities.

9. Strategic environmental purchases of land to block access, assemblage, or the extension of infrastructure, or a strategic change in zoning that would frustrate or suppress development.3

10. Veto actions by regional planning bodies in response to environmental lobbying (e.g., the California Coastal Commission and the Lake Tahoe Regional Planning Board).

11. Political pressure to adopt transfer development rights programs, resulting in donor parcels as stranded assets.

The term used to describe the paradoxical lack of market value transactions of environmentally sensitive land is "evidentiary blight." It means there is tainted sales evidence that cannot be used to appraise land suitable for preservation despite the existence of a number of applicable nonmarket sales.

An appraiser, Charles Warren, aptly summarized this paradoxical situation:

Do these possible transactions (described above) bear any resemblance to the private market? Very little. To some extent, they can exist only in the absence of private market activity. The public is constitutionally required to pay "just compensation" for taken land. Just compensation generally means market value. However, for reasons of environmental politics and land economics, there may be no private market activity. In its absence, what is market value?4

However, the market value standard is so universally embedded in the law that it has been judicially defined and applied even in illiquid and dormant markets. According to Kinter v. United States, "Even where there have been no sales of similar property in the vicinity upon which a basis of valuation might be predicated, the quest is still for 'market value."'5 The crux of this paradoxical and controversial problem of valuing land suitable for environmental preservation is "what is the market" for such land when none or few of the sales transactions reflect open and competitive market conditions? In such situations, government appraisal standards provide for the valuation of land that is suitable only to preservation use by a limited market appraisal model.6 This model requires simultaneous demand by a third party for preservation use other than by the

government entity acquiring the property. The problem is that the same blighting conditions that narrow the highest and best use of land to preservation also interferes with market demand by private, arm's length preservation buyers. A number of appraisal methods have been proposed to fill this void in the market.

APPROACHES TO DEFINING A PRESERVATION MARKET

Currently there are several proposed approaches for defining precisely what the market or nonmarket for preservation land is. These approaches often have confusing names: public interest value, mitigation market value, contingent valuation, highest bid approach, just and equitable approach, and other unnamed and obscure approaches.7

Preservation easement market (value to owner). Some appraisers and land economists contend that the prices paid for dedicating conservation easements reflect the value of preservation land. In states where private property owners have the right of condemnation, others assert that an environmental encumbrance on land can be self-created. However, in the above cases, a property owner can create a one-sided "seller's preservation market" to obtain a unilaterally established price in the market. The "paper diminution" in value claimed by property owners for self-imposing a conservation easement on their properties does not require the customary haggling and give-and-take negotiations that would occur if a second party were personally involved in two-party transactions. The "value to the owner" concept has been soundly rejected by no less than the U.S. Supreme Court."

Government agency market (public interest value approach). This approach is appealing and seemingly the most straightforward. The logic here is if the only sales available are preservation sales by public or semipublic entities, these sales are believed to make up the market. It is contended that the prices paid by government agencies and nonprofit conservation trusts reflect a public market for the preservation use of land. Some proponents of this position go so far as to argue that the higher prices often paid by government and nonprofits for preservation land reflect a price premium attributable to the intrinsic biotic or habitat value of such properties, or the public interest value in protecting such natural resources.

Because the object of voluntary preservation purchases is to remove land from the private market, public and nonprofit entities must often bid prices up beyond what the market would otherwise bear. The reason that bid prices for preservation land must be higher than even the highest and best economic use is that most often there is no substitute for preservation use in the market. Government agencies often target for purchase a single specific property for preservation on the grounds that it is unique and irreplaceable. Wildlife agencies often designate certain "mitigation parcels" or "exchange parcels" to offset the environmental impacts created by development. Under such situations, a landowner can "hold out" for a bonus price or a legal settlement price in lieu of litigation.

A weakness of this approach is that under prevailing law the actions of a public agency or nonprofit trust are not allowed to affect value

unilaterally in a real estate appraisal. The law is well established that the public cannot be charged for any enhancement in value resulting from the activities of a public or semipublic agency, nor can a landowner be asked to accept less than full market value because of any diminution in value caused by the activities of a public or taxexempt project. The U.S. Supreme Court stated the following:

It is not fair that the government be required to pay the enhanced price for which its demand alone has created. That enhancement reflects elements of the value that was created by the urgency of its need for the article. It does not reflect what a "willing buyer would pay to a willing seller" (United States v. Miller, supra, 317 U.S,. 369, 374) in a fair market. It represents what can be exacted from the government whose demands in the emergency have created a seller's market. In this situation, as in the case of land included in a proposed project of the government, the enhanced value reflects speculation as to what the government can be compelled to pay. This is hold-up value, not fair market value. That is a value which the government itself created and, hence, in fairness should not be required to pay.9

Mitigation market (mitigation bank, environmental subdivisions). David Michael Keating, Charles Edmonds, and Sarah Stanwick propose that environmental mitigation banks represent a separate and legitimate market for environmental resource land.lo They imply that the prices paid for mitigation bank credits reflect fair market value. They go so far as to propose a discounted cash flow technique typically used to value income-generating properties to value such land.

However, there are insurmountable problems with considering mitigation as a market." Mitigation credits are not an interest in real property and the prices paid for credits reflect forced transactions in regulated markets. Further, the cash flow methodology proposed for the valuation of mitigation credits is highly susceptible to speculative assumptions. Government land appraisal standards also prohibit the appraisal of any sort of speculative mitigation bank that does not already have an approved biotic survey and management plan, easements dedicated, perpetual endowment fund, and presales in place. Even if all the above conditions could be met, mitigation credits would not comply with government or appraisal industry standards because they reflect a complementary market, not a replacement market.

In addition, the major theoretical problem with this whole approach is that mitigation does not reflect the process of economic substitution. In economics, a complementary good is the converse of a substitute good. Economic complements tend to be used together and are defined as the "relation between two goods or services in which a rise in the price of one decreases the demand for the other."2 For instance, cereal and eggs are economic complements and butter and margarine are economic substitutes. Complements are contrasted with substitutes when the increase in the price of a good increases the demand in the other. Land appraisal is typically concerned with economic substitutes, not complements. Environmentally impacted land and mitigation land are an example of an economic complement. The problem with appraising mitigation land as a separate market is that an increase in the demand and value of such land decreases the demand and

value of impacted land at an adjacent or off-site location. Because mitigation is an economic complement, not a substitute, it may be considered an artificial market.

As noted by economists Robert S. Pindyck and Daniel L. Rubinfeld, another problem with complementary goods is that an increase in their price increases the cost of the whole bundle of goods, so that people demand less of both goods.13 For example, if people eat both eggs and cereal for breakfast, there will be a decline in the demand for both. This is precisely what happens with such complementary preservation mechanisms such as conservation easements, transfer of development rights (TDRs)14, environmental subdivisions, and mitigation banks. Complementary preservation mechanisms are intended to be give-backs for noncompensable takings. However, measures to replace open and competitive markets with artificial environmental market mechanisms are being recognized by the courts as a regulatory taking because of the diminution in demand and value found in complementary goods (see figure 1).15

Preservation exchange market (transfer development rights). Another attempt at defining an alternative market for preservation land is the government creation of transfer development rights (TDR) programs. A TDR is the transfer of development rights from one property (the sending or donor parcel) to another (the receiving or donee parcel). Unlike mitigation bank credits, TDRs are considered real property. The intent of a TDR program is to preserve land at no cost to taxpayers by shifting development density to other areas where growth is more acceptable. The problem with TDRs is that when no receiving property can be clearly identified, no market demand can be discerned and thus no value can be placed on the sending property.16 Moreover, TDRs and mitigation credits have the same problem: They are noneconomic complements, not substitutes.

Ecotourism market (contingent valuation, delphi method). In the "market of public opinion" approach, the ultimate end users, visitors, or ecotourists to national parks, nature preserves, and wilderness parks make up the market for preservation land. The major methods used for valuing preservation land under this approach to the problem are contingent valuation, travel cost methods, and the delphi technique. Contingent valuation is based on opinion research surveys to determine how willing people or experts are to pay or be taxed to visit, travel to, or protect natural resources. Here, the ultimate end users or public nonusers, not buyers and sellers in the real estate market, set the value of the preservation land.

This approach is analogous to appraising shopping center land. If customers had the choice of how much to pay to enter a commercial shopping center, they would probably report nothing or a marginally economic price. Difficulties with this approach are that:

The public opinion survey process can create the very values they purport to measure.

Survey results are often inconsistent and unreliable predictors of actual behavior. The results are not empirically verifiable.

Rarely are people knowledgeable in purchasing unimproved land in contrast to entry fees for national parks.17

This valuation approach replaces the market with public opinion or the opinion of experts. The problem with such valuation methods is that they are nonmarket based, hypothetical, and inadmissible evidence of market value under eminent domain law.

Public-private preservation market (pyramid sales). This market is made up of conservation agencies, land trusts, and private preservationists. The major problem with this approach is that it ignores the reality of collusion.

(Graph Omitted)

Captioned as: FIGURE 1

Many preservation land sales transactions involve purchases by private nonprofit land trusts that, in turn, resell the property to a government agency for a mark-up price (i.e., pyramid sales). Such pyramid-like sales by "shill" buyers, and subsequent resales, are not arm's length transactions that can be considered to reflect fair market value between unrelated parties. Moreover, the front-leg purchase of such dual transactions often occurs with full knowledge that the government will buy the property for the then-established sales price plus a mark-up fee based on an appraisal relying on the sales price of the first transaction as proof of market value.

In reverse fashion, it is also customary for many government utilities and other public entities to dedicate to nonprofit land conservancies (and/or state and county park departments for perpetual management) land purchased for the mitigation of public works projects' environmental effects. Thus, nature land is often conveyed back and forth from the government to the private sector and vice versa. The collaboration of the government and nonprofit sectors of the market for preservation land invalidates many nonprofit preservation agency sales from being considered in market value appraisals.

Arm's length preservation market (thirdparty demand approach). The only known exception to the prohibition against appraising land for the same preservation use that a government agency is acquiring it for is what I call the "third-party demand" test. The Uniform Standards for Federal Land Acquisitions states this rule as follows: "A proposed highest and best use cannot be the use for which the government is acquiring the property (i.e., missile test range, airfield, and park), unless there is a prospect and demand for that by others than the government."18

For example, a government agency wants to acquire seasonally inundated lakefront land for flood control purposes where a nonprofit preservation agency or private preservationist is contemporaneously active in purchasing the same portion of lakefront land for preservation. The acquisition activities of the third party represents a valid market as long as the preservation efforts are not within the scope of the same public project for which the land is being acquired (i.e., flood control) and do not

involve collusion.

Another situation is if there is potential for assemblage to an established habitat prese

rve for what is called "environmental connectivity." The classic case of potential environmental assemblage is a certain 6,254-acre ranch on the eastern tip of Santa Cruz Island facing the mainland in Santa Barbara County, California. The ranch faces the mainland and has 12 miles of ocean frontage. The property contains rare marine, biological, historical, and archaeological resources. It would be highly improbable that other land comprising 12 miles of ocean frontage could be assembled in the current highly restricted land market along the California coastline. The only available sales data of island properties are government purchases made as part of the Channel Islands National Park. The Nature Conservancy owns the remaining 54,000 acres of the island. The ranch was the subject of a 1997 condemnation action by the U.S. Department of Interior. Absent the influence of the public project for which the property is being taken, the obvious demand for the ranch property would be for assemblage by the Nature Conservancy, a third-party buyer other than the government. Another example of singular demand from third-party preservation buyers is a case in which an adjoining owner is looking to protect a view or seeking an environmental buffer.

ELEMENTS OF BLIGHT MODEL

The limited-market model diagram depicts how the "arm's length third-party market model" applies to the market analysis for preservation land (see figure 2). An explanation of the different components of this model is as follows:

Unconventional highest use tests. Normally, the purchase of land by a buyer for a use that is legally permissible, physically suitable, and the most economically profitable is its highest and best use. This is not the case with land in thin, disappearing, and embargoed markets due to preservation activities. Private preservation is an unorthodox highest and best use problem because a property need not be legally zoned for such a use and does not need to meet the conventional tests of economic feasibility. This is not much different from speculative land in which the ultimate legal use is typically unknown and the buyer motivation includes the risk of taking an uneconomic loss upon resale. To meet the tests of highest and best use, preservation land must be physically suitable and the prospect of a demand by an arm's length nongovernment buyer must be present. Moreover, it is not unusual in environmentally regulated land markets that a major portion of a property is zoned for open space, with only a little left for some economic use. It would seem illogical to rule out market demand by a private preservation buyer for properties that are substantially open space in character. The likelihood of any actual development on such properties even at the lowest possible densities is remote, given the formidable government and environmental opposition a property owner would need to surmount.

(Chart Omitted)

Captioned as: FIGURE 2

However, this approach to highest and best use analysis does not apply to situations in which land with established significant development potential is purchased for environmental preservation in urban areas. In such situations, the highest use of the property is removed from the property and replaced with less intense-use open space. The prices paid for higher-use properties cannot be considered in the valuation of land that is predominantly open space in character in thin, disappearing, or environmentally embargoed markets.

Smaller and larger parcel issues. Under existing land use law, the local government can zone portions of property for open space as long as a viable economic use is left on the property. In other words, a portion of land without sensitive environmental resources is left economic but the remainder is left uneconomic. There is no legal guideline for determining what proportion of land must remain economic (i.e., developable) or uneconomic (i.e., open space). Conceivably, a property owner can suffer a substantial "wipeout" of equity from downzoning and be left with 1% of economically usable land.19 For example, the 6,254-acre ranch on Santa Cruz Island, California, is allowed to cluster housing on only 2% of its land area or on parcels of 320 acres in minimum size. Unless legally subdivided, the property must sell as an economic whole. However, if an owner can legally subdivide the property into both development parcels and openspace parcels, there may be enhanced marketability to a conventional buyer and a preservation buyer.

New subdivision law in California that allows for the creation of an environmental subdivision of land of at least 20 acres might solve part of the complex preservation valuation problem.20 However, environmental subdivisions must have a completed biological survey, management plan, and conservation easements dedicated to a local wildlife agency costing a minimum of approximately $1 million regardless of size.21 An endowment fund must also perpetually manage the resources on the preservation parcel. These high costs minimally equate to $50,000 per acre for a 20-acre subdivision. This is an insurmountable economic barrier to the creation of most environmental subdivisions that can usually only be assumed by a large public entity or the largest developers. For example, it is estimated that 50% of wetlands are comprised of one acre or less in size.22 Further, creating environmental subdivisions on large parcels of land that are already predominantly zoned for open space in highly restricted markets is uneconomic unless there is a ready, able, and willing buyer for the environmental subparcel to front all the costs. Because environmental subdivisions are uneconomic, the subdivision of land for environmental protection can be construed as the subtle conversion of a property right into a financial obligation. Environmental subdivisions tend to suffer the fate of most other uneconomic complements described earlier of diminished demand and value.

Project influence rule. Under the Uniform Standards for Federal Land Acquisitions, the actions of a government agency cannot influence the appraised market value of land to be acquired by the government, whether positively or negatively. As shown on the accompanying diagram, the project influence rule prevents an appraiser from concluding the same highest use for property that the government is acquiring it for because the demand is

artificially created by the government rather than the market. The only possible exception provided in case law and government appraisal standards is that in which there is the prospect of a nongovernment buyer for the property that is unrelated to the public project for which the land is being acquired. However, collusion can make it impossible to find an "arm's length preservation buyer."

Scope of project rule. One of the most critical determinations in applying a limited market model to the valuation of land for preservation use is whether the land was "probably within the scope of the project from the time the government was committed to it." All government agencies must contain a project boundary description and date on which the project has been certified. If land is adjacent to or near a designated public project area, the enhancement or diminution in value caused as a result of the public project can be considered on those parcels. This is shown on the accompanying diagram by the dotted line that connects the public use for preservation, the demand by a prospective arm's length preservation buyer, and the highest and best private market use of the land. Perhaps a more critical problem faced by appraisers is not whether the appraised property is within the scope of a public project, but whether the comparable sale properties are. This presents a possible insurmountable problem with the roaming actions of private and nonprofit preservation agencies that have no project boundaries and do not need to file environmental or economic impact reports.

Evidentiary blight. Under the project influence rule in government appraisal standards, appraisals are to exclude any influences of the public project on the value of the appraised property. However, when the value of the remainder of the property or a nearby property is diminished, there may be grounds for an inverse condemnation lawsuit. An example is precondemnation blight that affects the marketability or value of properties before the date of condemnation. Precondemnation blight usually manifests itself as a pall on sales activity. However, the law is silent on how to handle the case of evidentiary blight, an abundance of market data but few or none of the sales meets the tests of fair market value transactions.

Demand analysis. One approach to solving the dilemma of evidentiary blight is finding a surrogate market of properties in a market area unaffected by such interference in the workings of the market. However, this most often is impossible because the primary market area may comprise properties with unique ocean-, lake-, or riverfront land, or other irreplaceable natural attributes. Many of the properties along the California coastline, at Lake Tahoe along the Nevada-California border, or the Santa Monica Mountains Conservancy area near Los Angeles are examples of unique properties and designated preservation areas where a surrogate market would be difficult to find. All the measures to protect environmental resources eliminate the tiers of the market for development, speculation, investment holding, and even wealthy estate buyers. The result is that a limited market of public or private buyers, typically with little or no effective market demand beyond one buyer. This single-buyer market does not meet the conventional tests of market value, but may nonetheless be the only "market."

If there is a blight on valid sales evidence in a thin, vanishing, or environmentally embargoed land market, one possible way to appraise highly restricted land for its market value might be to ascertain that there is the prospect of demand by an arm's length special-purpose preservation buyer for the property unconnected with the government agency acquiring the property and outside the scope of the public project for which it is being acquired.

This method may comply with the Uniform Standards for Federal Land Acquisitions but may not comply with the Federal Interagency Land Acquisition Task Force position statement against concluding a highest and best use for preservation in a real estate appraisal and using preservation sales for the same. The reason for this conflict is that appraising natural resource land in thin, disappearing, or environmentally embargoed markets is like trying to fit a square peg into a round hole. The only method of appraising that is consonant with the limited market for such land is as a special-purpose property. Appraising land for preservation use in such beleaguered markets is an extraordinary situation that case law, appraisal standards, the appraisal industry, and government land acquisition procedures have not kept pace with.

Market value data availability. Even where it is supportable to conclude a limited-market demand for preservation in a real estate appraisal, an appraiser must still meet the market value standard. But the law is not tied down by an inflexible concept of market value as appraisal theory and standards are. Such sales must reflect transactions made by buyers at arm's length from a government preservation project and unrelated to the scope of the public project for which the property is being acquired. The sales must also not involve any illegitimate attempts to depress or inflate the sales price.

There are several problems with trying to find land sales data that are voluntary, arm's length, not under duress, and not project influenced. As noted, typically the few land sales that reflect legally defined sale conditions of market value are not comparable in terms of the unique physical features that the private market is willing to pay a premium for (e.g., ocean frontage or view, lake or river frontage or view, and wetlands). Flawed appraisals often result, which mistake the only available market evidence of inferior properties as proof of market value regardless of its comparability. Sales of inferior properties that do not have the critical physical amenities demanded by both the private market and preservationists are a poor reflection of market value.

CASE VIGNETTES OF PRESERVATION MARKET INTERFERENCE

The first example, a 3,000-acre ranch on the border of Orange County and San Diego County in Southern California, has been designated as habitat for the preservation of the gnat-catcher bird. About 2,000 acres of the ranch comprises steep unusable slopes. The remaining 1,000 acres of mostly level, usable land is entirely overgrown with the coastal sage scrub plant, the habitat for the gnatcatcher. The property is zoned for agricultural uses. To appraise such a property even for an agricultural use would be entirely hypothetical because environmental constraints effectively forbid such uses. An appraisal based on agricultural use would result in a paper value

that could not be actually realized in the market. Moreover, an appraisal may have to rely on pure agricultural land sales data from Imperial County some 200 miles away where there is no proximity to urban areas or the ocean. The preservation designation of the parcel has deterred speculators. A large aerospace contractor that formerly leased the site for a testing ground retains an appraiser to value the property. The aerospace contractor is a responsible party required under the law to clean the site of groundwater contamination. However, the gnat-catcher habitat is unaffected by the contamination. There is no real market demand for the property except by a preservation buyer. There is also no truly comparable market data available from which to derive a valid market value for the property.

A second example involves mountain land in the desert area of the Southwest and that has been designated for the preservation of the mountain goat habitat. No study has provided evidence that the habitat of the mountain goat is endangered or that the animal even inhabits the area. The land's market value runs between $200-$300 per acre with a modal value of $250 per acre. The Protected Lands Trust (PLAT), a conduit buyer for resale of the land to the government at its purchase price plus a mark-up fee, has been buying land for mountain goat habitat for $500 per acre. With the resources of the government behind it, the PLAT floods the market and drives up the going price for such land. Without the give and take of a market, the only limitation on price is the money supply of government agencies. Property owners will not sell their land for its open market value ($250 per acre), given the higher price that the PLAT is paying ($500 per acre). This effectively squelches any nonpreservation sales transactions and leads to a dearth of valid market data.

A different local government agency wants to buy a parcel of the land in the same area to mitigate environmental impact from its public project and cannot condemn the land. An appraiser is retained to appraise a suitable parcel of mitigation land. The seller will not accept anything less than the $500 per acre going price for a voluntary sale given the actions of the PLAT. The appraiser cannot find nonproject-influenced sales data outside the mountain goat habitat because the PLAT has monopolized the market. The appraiser uses the scant few older sales available and concludes $250 per acre. This appraisal is rejected by the PLAT because it cannot induce a voluntary sale. A second appraiser who is an expert in preservation value and willing to use the PLAT market data is retained. The transaction is ultimately consummated at the higher appraised valuation reflecting government-inflated prices. The first appraiser is no longer retained by PLAT for valuation assignments.

The third example, a five-acre steep hillside property, is an in-holding surrounded by a master-planned development for 90 estate lots on 180 acres in Greenville. The city's hillside development ordinance permits an overall density of 0.50 lots per gross acre. The hillside ordinance provides for the purchase of transfer development rights (TDRs) by developers from owners of small parcels and public utility parcels within the masterplanned area. The only condition of the donor parcels is that they remain as perpetual open space in return for higher density on the recipient parcel. At present, the property is economically infeasible to develop as a stand-alone parcel. The property could be developed by a custom estate lot owner-developer that would desire the view amenity regardless of production

costs. But such subeconomic use of the land would be highly speculative at present. Buyers desiring to hold the parcel as an investment for a future home site for retirement or development is another possible market. But the TDR program has effectively replaced the market for speculation and investment in land. The highest and best present use of the property is for the sale of development credits to the owner of the surrounding master-planned project. Thus, there is no market for the parcel without the surrounding complementary development. The owner of the one-acre inholding parcel is left hostage to a price that the developer is willing to pay for the TDR of about one-third of the price for similar speculative land. An expert appraiser is hired to value the five TDRs. The appraiser bases his opinion of value on the price paid for prior TDRs, without disclosing that such transfers reflect a "closed market" value.

"NATIONALIZED" PRESERVATION MARKETS

On the macroeconomic level, the reason that land suitable for environmental preservation has recently become so confusing and controversial to appraise is that this type of land has been principally downzoned to openspace use while the private sector preservation market has become organizationally extinct.[2] This sector has been gradually replaced with a complex system of physical takings, land use regulations, and syndicated markets formed by nonprofit preservation organizations. The system has restricted free markets to accomplish environmental protection "at any cost." Attempts to replace a free market with artificial market-like mechanisms such as TDRs, environmental subdivisions, and mitigation credits is becoming recognized by the courts as regulatory takings. The establishment of habitat conservation plan areas (HCPs) is another such trend.[24] Because HCPs are public projects, they eliminate any legal possibility of a private or a limited market for preservation within designated project areas. Paradoxically, they also eliminate the private market for preservation land from which buyers, sellers, and appraisers could evaluate its market value. As economist Tom Bethell has aptly pointed out, market value cannot be ascertained in socialized economic systems, or where the value of commodities such as land have been "nationalized"--a phenomenon in the most active markets for nature land in the United States.

The national controversy over the valuation of land for environmental protection has its origin in the complex system of environmental preservation. Various appraisal methods have been proposed to fill the void in the workings of a free market by those who are environmentally predisposed such as public interest value, mitigation banks, and contingent valuation. Other methods have been proposed by those who are more free market oriented that assert that the highest bids for comparable land suitable for preservation set its value regardless of who the buyer is.[26] Countering these proposed solutions to the problem, government agencies and the appraisal industry have issued position statements that preservation c

annot be appraised for market value because it is a "noneconomic highest and best use."[27] All of these approaches to the problem overlook the reality of thin markets for marginally productive land, disappearing markets for private preservation, markets dominated by nonprofit preservation land syndicates, blighted land sales data, and artificial market mechanisms for preservation. Ironically, those who most advocate for

the adoption of new valuation methods to preserve the environment are the ones who fail to recognize that the collaboration of government and private nonprofit environmental preservation organizations is what is preventing an autonomous market for such land to reemerge. The position statement issued by government wildlife agencies has likewise failed to consider that it is the regulatory actions of other levels of government in concert with environmentalists that has created artificial "noneconomic highest and best use" market mechanisms for preservation (TDRs, mitigation banks, environmental subdivisions, conservation easements, etc.).

A third-party model is the only known method of establishing a market for preservation land that is provided for in the law and consistent with appraisal theory. But even where there may be a third-party preservation buyer, there typically is no valid market data to value such land. It is unlikely that a limited market model will fully solve the valuation problem of natural resource land in such highly constrained markets because appraisals are no substitute for the workings of a market. This is why many enlightened government agencies are placing emphasis on negotiations rather than appraisals in the purchase of land for environmental preservation purposes in embargoed markets or where artificial preservation market mechanisms have been imposed. Government agencies that try to fit highly constrained, limited market properties in environmentally besieged markets into the land appraisal standards for fully open market properties may end up in bureaucratic and legal frustration. Public agencies may find themselves defending a position that is antithetical to constitutional protection or providing windfall compensation to property owners. In this sense, the controversy over how to value environmentally sensitive land cannot be resolved on methodological grounds alone but must recognize that the private preservation market unrelated to government activity must be restored.28

IMPLICATIONS FOR CONDEMNATION APPRAISAL

The following implications are offered for condemnation appraisal practice:

1. Before completing an appraisal, an appraiser may have to report to a public agency client that there is no effective market demand, only a preservation demand for the property, and that there is only inferior market evidence that can be used to appraise properties with significant natural amenities and that are desirable to both the private real estate market and preservationists.

2. Appraisers undertaking assignments for such land may need to turn to legal counsel before or during the appraisal about precondemnation blight on sales data, scope of the project rule, and the project influence rule. The general legal rule is that valid market demand for the appraised property outside the scope of the project for preservation must be considered.

3. Appraisers suspecting the type of market interference described in this article may need to inform their public agency clientele that they must first complete a market study to ascertain if there is any environmental blight in the market. Accordingly, appraisal contracts should include a phased scope of work so as to protect the appraiser from accusations of nonperformance if neither a market nor valid sales data can be found.

4. Many appraisers may want to reject such assignments altogether, given the frequent expectation by some government agencies and nature land trust conduits that appraisals incorporate higher purchase prices paid by government or quasi-government agencies to close deals.

5. Public agencies must realize that it is highly unlikely that appraisers can comply with government land appraisal standards in environmentally interfered markets unless they issue special instructions to the appraiser under the "Jurisdictional Exception" to the Uniform Standards of Professional Appraisal Practice.29

6. As they undertake the assignment, appraisers must inform their public agency clientele that such preservation mechanisms as TDRs, mitigation bank credits, environmental subdivisions, and conservation easements may not meet the full tests of legally defined market value.

7. Public agency review appraisers should be aware of the subtle appraisal flaw of mistaking the only available land sales data as proof of market value regardless of its physical and market comparability to the appraised property. Appraisers retained to value land for physical takings for preservation purposes need to be aware that the entire market may be blighted, resulting in misleading valuations.

Sidebar:

Some appraisers and land economists contend that the prices paid for dedicating conservation easements reflect the value of preservation land.
Sidebar:

TDRs and mitigation credits are noneconomic complements, not substitutes.

Sidebar:

In private preservation, property need not be legally zoned for such use and does not need to meet the conventional tests of economic feasibility.

Sidebar:

Under land use law, the local government can zone portions of property for open space as long as a viable economic use is left on the property.

Sidebar:

Attempts to replace a free market with artificial marketlike mechanisms is becoming recognized by the courts as regulatory takings.

Footnote:

1. Arthur O'Sullivan and Steven M. Sheffrin, Microeconomics (Englewood Cliffs, New Jersey: Prentice-Hall, 1998), 316-331.
2. Tim Herdt, "State May Get Land to Settle Tax Debt," Ventura County Star (August 9,1998): Al.

3. Donald C. Wilson, "How Tactical Utility Influences Price and Value," The Appraisal Journal (April 1998): 9S98.

4. Charles Warren, "Valuing Environmentally Sensitive Land," Real Estate Review (Spring 1998): 90-91.

Footnote:

5. Kinter v. United States, 156 E 2d 5, 7 (C.A. 3,1946).

6. The term "embargo" is used here to mean an all-out restriction on the trade of a good. See David Olander, Microeconomics, 3d ed. (Boston, Massachusetts: Irwin, 1998), 494.

7. For an overview of the noneconomic approaches to valuing nature land, see John Foster, Valuing Nature? (New York, New York: Routledge, 1997), 1-273.

8. United States v. Petty Motor Co., 327 U.S. 372, 377-378 (1946).

Footnote:
9. United States v Cors, 337 U.S. 325, 333-334 (1949).

10. David Michael Keating, Charles P. Edmonds, and Sarah W. Stanwick, "A Conceptual Approach to Appraising Wetland Mitigation Banks," The Appraisal Journal (April 1997):165-170.

11. Wayne C. Lusvardi, Letters to the Editor, "A Bankrupt Framework for the Valuation of Mitigation Bank Credits," The Appraisal Journal (October 1997): 426-430.

12. J. Black, A Dictionary of Economics (New York, New York: Oxford, 1997), 74.

13. Robert S. Pindyck and Daniel L. Rubinfeld, Microeconomics, 4th ed. (Englewood Cliffs, New Jersey: Prentice-Hall, 1998), 25-26.

14. John C. Danner, "TDRs---Great Idea But Questionable Value," The Appraisal Journal (April 1997): 133-142.

Footnote:

15. Suitum v. Tahoe Regional Planning Agency 117 S. Ct. 1659,137 LEd. 2d 980 (1997).
16. Danner, 139.

17. Roger Bate, Pick a Number: A Critique of Contingent Valuation and Its Application in Public Policy (Washington, D.C.: Competitive Enterprise Institute, 1993),1-28.

Footnote:

18. Interagency Land Acquisition Conference, Uniform Appraisal Standards for Federal Land Acquisitions (Washington, D.C.: 1992),10. See also United

States v. Chandler-Dunbar Co., 229 U.S. 53, 80-81 (1913); and United States v. 320 Acres of Land, 605 F.2d 762, n. 26, 811, n. 107 (Fifth Cir. 1979).

Footnote:

19. Kevin J. Coakley, Inverse Condemnation: The Search for the Relevant Parcel (New Jersey: Connell, Foley, and Geiser, LLP), 1-5.

20. California Land Surveyor's Association, "Environmental Subdivisions: Creation," Subdivision Map Act (Santa Rosa, California: CLSA, as amended January 1,1997), sec. 66418.2.

21. Interview with L. Simonek, environmental specialist, Metropolitan Water District of Southern California, Los Angeles, 1998.
22. Donald A. Hammer, Creating Freshwater Wetlands, 2d ed. (New York: Lewis Publishers, 1997), 338.

Footnote:

23. Victoria Edwards, Dealing in Diversity: America's Market for Nature Conservation (New York: Cambridge University Press, 1995), 155-166.

24. Timothy Beatley, Habitat Conservation Planning: Endangered Species and Urban Growth (Austin, Texas: University of Texas Press, 1994), 23-29.

25. Tom Bethel, The Noblest Triumph: Property and Prosperity Through the Ages (New York: St. Martin's Press, 1998),11. 26. Bill Mundy and William N. Kinnard, Jr., "The New Noneconomics: Public Interest Value, Market Value, and Economic Use,"

The Appraisal Journal (April 1998): 207-214.

27. Woodward S. Hanson, "Public Interest Value and Noneconomic Highest and Best Use: The Appraisal Institute's Position," Valuation Insights and Perspectives (Spring 1996): 28; Interagency Land Acquisition Conference. On the Issue of Whether a NonEconomic Highest and Best Use Can Be a Proper Basis for the Estimate of Market Value. Position paper, Washington, D.C., April 14, 1995.
Footnote:

28. Terry L. Anderson and Donald R. Leal, "Rekindling the Privatization Fires: Political Lands Revisited" in Terry L. Anderson, Breaking the Environmental Policy Gridlock (Stanford, California: Stanford University Hoover Press, 1997), 53-81. 29. The Appraisal Foundation,Uniform Standards of Professional Appraisal Practice(Washington, D.C.:The Appraisal Foundation,1998),7.

Reference:

REFERENCES

Reference:

Anderson, Terry L., and Donald L. Leal. 1991. Free Market Environmentalism.

San Francisco, California: Pacific Research Institute for Public Policy.

DeLong, James V. 1997. Property Matters: How Property Rights Are Under Assault-And Why You Should

Care. New York, New York: The Free Press.

DiMento, Joseph, ed. 1990. Wipeouts and Their Mitigation: The Changing Context for Land Use and Environmental Law. Cambridge, Massachusetts: Lincoln Institute of Land Policy.

Reference:

Epstein, Richard A. 1985. Takings: Private Property Rights and the Power of Eminent Domain. Cambridge, Massachusetts: Harvard University Press.

Fischel, William A. 1995. Regulatory Takings: Law, Economics, and Politics. Cambridge, Massachusetts:

Harvard University Press.

Gallies, David L. ed. 1993. After Lucas: Land Use Regulation and the Taking of Property Without Compensation. Chicago, Illinois: American Bar Association.

Pollot, Mark L. 1993. Grand Theft and Petit Larceny: Property Rights in America. San Francisco, California: Pacific Research Institute for Public Policy.

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THIS IS THE FULL-TEXT.

Geographic Names: US

Descriptors: Land use; Valuation; Nature; Real estate appraisal; Preservation; Models; Studies
Classification Codes: 9190 (CN=United States); 1540 (CN=Pollution control); 8360 (CN=Real estate) ; 9130 (CN=Experimental/Theoretical)

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THE ROLE OF ENVIRONMENTAL ATTITUDES IN INCENTIVE-BASED ENVIRONMENTAL MANAGEMENT: THE CASE OF THE WETLAND RESERVE PROGRAM

Author: DIAGNE, ASSANE
Degree: PH.D.
Year: 1996
Corporate Source/Institution: THE LOUISIANA STATE UNIVERSITY AND AGRICULTURAL AND MECHANICAL COL. (0107)
Director: E. JANE LUZAR
Source: Volume 5709A of Dissertations Abstracts International.
PAGE 4055 . 179 PAGES
Descriptors: ECONOMICS, AGRICULTURAL ; ENVIRONMENTAL SCIENCES ; POLITICAL SCIENCE, PUBLIC ADMINISTRATION
Descriptor Codes: 0503; 0768; 0617

Environmental policy in the United States is increasingly relying on incentive-based mechanisms (IBM). Incentive-based mechanisms, are voluntary environmental management instruments based on free market environmentalism, a framework that attempts to harness market forces. A multi-disciplinary approach was developed to evaluate participation decisions in IBM's such as the Wetland Reserve Program. This approach extended the traditional utility maximization approach to choice behavior by including alternative measures of environmental attitudes based on the theory of reasoned action or the New Environmental Paradigm. The addition of these psychological constructs conceptually improved the utility maximization by allowing the consideration of well established determinants of behavior.

Probit and Tobit models derived from the conceptual framework were empirically tested using primary data collected via a mail survey of Louisiana wetland owners. Results presented suggest that the acreage of wetlands owned, the level of information about the WRP, respondents' involvement in environmental organizations, education level, income, the number of people living in the household, and attitudes were significant in explaining Louisiana wetland owners' decision to offer to participate as well as the level of participation in the WRP.

The significance of attitude measures as explanatory factors suggests that a successful implementation of IBM programs depends, in addition to getting the economic incentive "right", on properly addressing attitudinal concerns. Comparison between the specific attitude measures derived from the theory of reasoned action and the general NEP-based environmental attitude was inconclusive. Therefore, until further evaluation, these alternative measures can be used interchangeably.

Record: 1

Title: TECHNOLOGY ASSESSMENT: NEW FORCES LIKELY TO AFFECT INDUSTRIAL MARKETING STRATEGY.

Authors: Medford, R. Derek[1]

Source: Industrial Marketing Management; Jun73, Vol. 2 Issue 3, p225-233, 9p, 1bw

Document Type: Article

Subject Terms: *BUSINESS enterprises
*DECISION making
*INDUSTRIAL management
*INDUSTRIAL marketing
*MANAGEMENT
*MARKETING
*TECHNOLOGY
*MARKETING strategy
TECHNOLOGY assessment

Abstract: The article discusses the impact of technology assessment on industrial marketing. Technology assessment is defined as a social invention which will facilitate appropriate societal control of physical inventions. It also serves as a tool for the renewal of basic decision-making institutions, the democratic process and the free market economy. Some of the factors which affect industrial marketing strategy include: increasing pressure of population growth; instabilities in social, ecological and economic developments and increasing dependence on technology. Furthermore, it offers advice to companies acting independently to prepare themselves for the changes which will be necessary when technology assessment becomes a required addition to market analysis.

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ISSN: 0019-8501

Accession Number: 7330983

Database: Business Source Complete